

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

THE GREAT PLATEAU

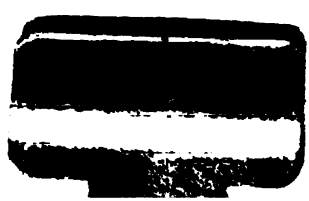


CAPTAIN C. G. RAWLING

YC 42141

LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA.

Class



THE GREAT PLATEAU

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA



A Woman of Tankse.

THE

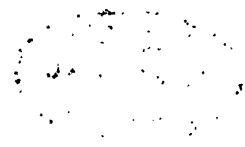
[illegible] PLATEAU

[illegible]

[illegible]

[illegible]

[illegible]



LONDON
EDWARD ARNOLD
[illegible] MADISON SQUARE, [illegible] NEW SERIES
Publisher to the India Office
1905

[All Rights Reserved]



THE GREAT PLATEAU

BEING

AN ACCOUNT OF EXPLORATION IN CENTRAL TIBET, 1903, AND OF THE GARTOK EXPEDITION, 1904–1905

BY

CAPTAIN C. G. RAWLING

SOMERSETSHIRE LIGHT INFANTRY

WITH ILLUSTRATIONS AND MAPS

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

LONDON

EDWARD ARNOLD

41 AND 43 MADDOX STREET, BOND STREET

Publisher to the India Office

1905

[*All Rights Reserved*]

D5785
R3

TO

COLONEL SIR F. E. YOUNGHUSBAND, K.C.I.E.

PREFACE

In the following pages I have endeavoured to lay before the reader an account of two journeys undertaken in Tibet, in districts situated many hundreds of miles apart and under diametrically opposite conditions. The first expedition penetrated into the interior of the uninhabited and barren regions of the Northern Desert at a time when Tibet was rigidly closed to foreigners. The second led through the rich and thickly populated valleys of the Brahmaputra, and was made with the cognisance and permission of the Lhasa Government, though only rendered possible by the notable success of Sir Francis Younghusband's Mission.

The natural obstacles inseparable from exploration in Tibet are so varied and numerous, that but little progress would be made were it not for the aid given by those who are interested in travel and who are willing to render every assistance in their power. I therefore take this opportunity of tendering my thanks to all who have contributed to the success of the journeys here described, and more particularly to Colonel St. G. Gore, R.E., Mr. J. Eccles, and the Officers of the Survey of India; Major M. Ray, D.S.O., Intelligence Branch; and Sir Clements Markham, K.C.B., and the Council of the Royal Geographical Society.

C. G. R.

November 1905.

CONTENTS

PART I

EXPLORATION IN CENTRAL TIBET

CHAP.		PAGE
I.	INTRODUCTION	3
II.	PREPARATIONS FOR DEPARTURE	8
III.	READY TO START	13
IV.	THE JOURNEY BEGUN	18
V.	LEAVING CIVILISATION	29
VI.	ACROSS THE FRONTIER	39
VII.	DIFFICULTIES AND DANGERS	45
VIII.	TO ANTELOPE PLAIN	58
IX.	TREASURE TROVE	69
X.	REJOINING HARGREAVES	75
XI.	IN UNKNOWN COUNTRY	82
XII.	VARIOUS ADVENTURES	92
XIII.	HARD AT WORK	100
XIV.	ARU TSO	108
XV.	A PLEASANT INTERLUDE	114
XVI.	TROUBLE WITH THE MEN	121
XVII.	STOPPED BY TIBETANS	127
XVIII.	TURNED BACK	137
XIX.	THE END OF THE EXPEDITION	145

PART II

THE GARTOK EXPEDITION

CHAP.		PAGE
I.	EVENTS OF THE PRECEDING YEAR	159
II.	PREPARATIONS AT GYANTSE	161
III.	ON THE ROAD TO SHIGATSE	168
IV.	INTERVIEW WITH THE TASHI LAMA	176
V.	THE EXPEDITION REACHES LHATSE DZONG	188
VI.	MOUNT EVEREST	205
VII.	"FAR FROM THE MADDING CROWD"	224
VIII.	UNLIMITED SPORT	230
IX.	HOLY MANASAROWAR	240
X.	PECULIAR CUSTOMS	254
XI.	THE HOME OF THE GODS	259
XII.	GARTOK REACHED	271
XIII.	INTO A NEW LAND	280
XIV.	A FORGOTTEN CITY	285
XV.	ACROSS THE FRONTIER	297
	APPENDIX: THE FAUNA OF TIBET	307
	INDEX	321

LIST OF ILLUSTRATIONS

A WOMAN OF TANKSE	*Frontispiece*	
SHOEING PONIES IN LEH	*Facing page*	14
OUR CARAVAN PONIES IN LEH SERAI	„	14
WOMEN OF TANKSE SIFTING GRAIN	„	22
HARGREAVES AND HIS PONY ON THE MARSI-MIK LA, 18,300 FEET	„	30
THE MORNING OF DEPARTURE FROM TANKSE	„	30
WESTERN TIBET SCENERY	„	36
YAKS CROSSING AN ICE BRIDGE IN THE CHANGCHENMO VALLEY	„	36
NEAR SHEMEN TSO	„	50
KIANG PLAIN NEAR SHEMEN TSO	„	50
HARGREAVES' CAMP AT ARPORT TSO; DEAD PONIES IN THE FOREGROUND	„	70
HALT BY THE WAY	„	84
A COUNTRY GENTLEMAN SALUTING WITH HIS TONGUE	„	84
SHOEING PONIES NEAR LAKE MARKHAM	„	98
DIGGING FOR WATER. THE BATH BEING USED AS A TROUGH	„	98
AT SURVEY WORK WITH SOONAM SIRRING	„	106
HUPING TSO	„	106
ARU TSO	„	110
NOMAD FAMILY OF WESTERN TIBET	„	116
OUR CAPTORS	„	134
A TIBETAN NOMAD'S TENT	„	146
CAMP ON THE KHEO RIVER	„	146
A SOLDIER OF RUDOK	„	152
MEN OF RUDOK SENT TO ASSIST US	„	152
ONE OF THE FIVE GOLDEN TOMBS AT TASHI LHUMPO	„	159
ENTRANCE GATE OF SHALU MONASTERY	„	170
FORTIFIED WALL ACROSS THE ROAD NEAR PIN-DZO-LING	„	170

FROM SHIGATSE FORT LOOKING NORTH	*Facing page*	174
PART OF SHIGATSE, LOOKING EAST FROM THE FORT	„	174
THE GREAT MONASTERY OF TASHI LHUMPO	„	182
SARCOPHAGUS OF THE FIRST TASHI LAMA; OF GOLD AND PRECIOUS STONES	„	182
SHIGATSE FORT	„	186
CHINESE BARRACKS AND THE MARKET AT SHIGATSE	„	186
IRON CHAIN AND SUSPENSION BRIDGE OVER THE BRAHMAPUTRA	„	190
LHATSE VILLAGE AND A PORTION OF THE MONASTERY	„	190
THE BRAHMAPUTRA IN THE DRY SEASON	„	196
PIN-DZO-LING TEMPLE AND MONASTERY	„	196
LHATSE FORT AND MONASTERY	„	198
HIRA SINGH DOCTORING SICK TIBETANS AT LHATSE	„	202
LAMAS OF LHATSE BRINGING THEIR DOGS FOR SALE	„	202
FORCING THE FERRY-BOAT THROUGH THE ICE FLOES OF THE BRAHMAPUTRA	„	218
GURKHA ORDERLIES AND AN INTERPRETER	„	218
AT WORK	„	228
A CHORTAN ON THE RIGHT BANK OF THE BRAHMAPUTRA	„	228
A RELIGIOUS MENDICANT	„	240
BEGGARS	„	240
CHANNEL BETWEEN MANASAROWAR AND RAKAS TAL	„	250
KAILAS PARBAT, THE SACRED MOUNTAIN	„	250
YAK DRIVERS	„	264
YAKS ARRIVING IN CAMP	„	264
THE PLATEAU UPON WHICH THE ANCIENT TOWN OF TOOLING STANDS	„	286
THE ANCIENT CANTILEVER BRIDGE WHICH SPANS THE SUTLEJ NEAR TOOLING	„	286
SANDSTONE CAVES AT TIBU	„	292
LEAVING A RAVINE IN THE SUTLEJ VALLEY	„	292
TIBETAN GAZELLE	„	310
TIBETAN ANTELOPE	„	310
WILD YAK	„	310
MAP OF WESTERN TIBET	„	156
MAP OF SOUTHERN TIBET	*at end*	

PART I

EXPLORATION IN CENTRAL TIBET
1903

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

PART I

EXPLORATION IN CENTRAL TIBET

1903

CHAPTER I

INTRODUCTION

THE ancient history of Tibet is practically unknown. Neither in its monasteries nor in its temples have records been discovered which throw any light on its rulers or its people. Inhabited it must have been, as it lay contiguous to the powerful kingdom of China, with its teeming population and commercial wealth. Marvellous indeed must have been the earliest journeys made by Europeans, for it is known that between the sixth and eleventh centuries Nestorian and Armenian missionaries penetrated far into the country in their efforts to propagate the Christian religion. No accounts of their travels, however, are now in existence, and it was not until 1626 that the Portuguese, Antonio de Andrade, mentions in a letter, dated August 15th of that year, that he had crossed the Himalayas and visited Tsaparang, on the head-waters of the Sutlej. An event of far greater importance was, however, near at hand, for the accounts of Johann Grueber, an Austrian of the Jesuit Order, and of Albert D'Orville,

a Belgian, show that these adventurous priests visited Lhasa in 1662. At various intervals other European missionaries entered Tibet, but none were more successful than the Capuchin Friars, who not only travelled to Lhasa but settled there in 1708. Scanty records have been left by these early adventurers, and the first clear account is furnished by Mr. G. Bogle, an Englishman who was sent into the country by Warren Hastings in 1774–75. He was followed by Lieutenant Turner in 1783, and in 1812 by Mr. Moorcroft. The latter reached Gartok, but was shortly afterwards murdered close by. No further travels of importance took place until 1846, when the famous Fathers Huc and Gabet entered Lhasa, and as a result of their journey gave to the world some delightful letters descriptive of the place.

While these French missionaries were in Lhasa, Lieutenant H. Strachey crossed the border into Western Tibet and penetrated as far as Manasarowar Lake. But travel was becoming more and more difficult, for about this date the jealous rulers of the country were gradually closing the land to all foreigners, and especially to Europeans, and another fifty years consequently elapsed before other attempts were made to penetrate the mystic land. Then explorers followed fast upon one another's footsteps, the best known being Littledale, Bower, Wellby and Deasy, all Englishmen; Bonvalôt, the Duc D'Orleans, and Dutreuil de Rhins, the last-named being murdered by the Tibetans in 1893; Mr. Rockhill the American, Dr. Sven Hedin the Swede, and Przhevalsky the Russian.

Despite these efforts, the knowledge gained of this immense tract of country remains scanty, and though the veil of mystery which has hidden Lhasa for so long has recently been lifted by the Tibet Mission, yet

hundreds of thousands of square miles remain that have never been seen by any European. We know that Tibet forms as a whole an immense plateau, that most of the valleys are higher than Mont Blanc, that numerous and great lakes exist, and that the towns and villages are few in number, but beyond this our knowledge is practically nil.

The expeditions under Wellby, Bower and Deasy are the only ones which have any direct bearing on our first journey, and all three had a common base, viz., Leh, the capital of Ladak, the most easterly district of Kashmir; all took the same outward route—the only one available, since the others were jealously guarded by the Tibetans, and it would have been impossible for small parties to have forced their way through a hostile country.

The expeditions made their way over Chang La,[1] 18,000 feet above sea-level, to Tankse, and from there to Phobrang, the most easterly village in Kashmir. Thence they crossed the Marsi-mik La, 18,400 feet high, into the Changchenmo Valley, and proceeded along this to the Lanak La, over which they crossed into Tibet. They then traversed the Soomjeling Plain to the fresh-water lake of Arport. From Arport Tso,[2] Deasy and Wellby struck in an east-north-easterly and Bower in an east-south-easterly direction.

Deasy reached Antelope Plain about nine marches due east, and, finding the country of an unpromising nature, moved south, but was turned back by an armed force of Tibetans in the vicinity of the Lhasa road; travelling west-north-west, he eventually returned to the Lanak La.

Wellby kept on due east from Antelope Plain, and after suffering great hardships and losing all his

[1] La = pass. [2] Tso = lake.

baggage animals and most of his men, passed through China and reached Shanghai.

Bower, accompanied by Dr. Thorold, on leaving Arport Tso, passed Aru Tso and made direct for Lhasa. His expedition was also stopped by Tibetan officials when still many marches distant from the sacred city; he therefore proceeded due north, and finally emerged also at Shanghai.

The dangers incurred by these expeditions did not, unfortunately, result in a compensatory addition to our knowledge of the country. Wellby's map, mainly owing to the incompetence of his native surveyor, was practically useless; so misleading was it, indeed, that it is impossible to follow clearly the route taken.

Bower achieved a more successful result, though but little of the country on either side of the route was mapped.

Deasy, on the other hand, made a valuable and accurate survey, a large number of peaks being triangulated, and the intervening districts filled in with good topographical details.

Our expedition was undertaken with the object of verifying the earlier results, filling in any variant gaps, and, especially, penetrating and exploring the hitherto unknown land.

In 1895 I had visited Zanskar and Lahoul, in 1900 Baltistan and Ladak, and, later, the valleys of the Pangong. In 1902 I had entered the Changchenmo Valley, and, pushing on over the Lanak La to Arport Tso, reached a point not far from the shores of Shemen Tso. All these journeys were undertaken for the sake of sport, and we depended entirely upon the rifle for our supplies of food.

I returned to Leh in the latter year, so much impressed by what I had seen that I had already

formed the determination to do my utmost to visit this weird and fascinating country in the following spring, in order to explore and survey it in an easterly direction as far as possible.

On my return to Peshawar, I wrote to Colonel St. G. Gore, late Surveyor-General of India, asking for his advice and assistance. These were both generously accorded, and conduced very largely to the success of the work which we were finally enabled to perform. To Colonel Gore's invariable courtesy and willingness to render help, travellers in Southern Asia have been indebted for several years past.

To the British officer desirous of undertaking extended travel, the greatest impediment is the difficulty of obtaining leave of absence—a difficulty which, it is needless to say, is increased if the applicant has no particular claim to such leave. The matter, however, had to be faced, and in this particular instance was most satisfactorily settled by my Colonel according to me six and a half months' leave of absence from the regiment.

I had now obtained the necessary leave, the services of a sub-surveyor (kindly placed at my disposal by Colonel Gore), and permission from the Foreign Office to cross the frontier into Tibet.

There remained the most important problem, viz., the selection of a suitable *compagnon de voyage*; but, fortunately, this proved to be easy of solution, as the very man was at hand in the person of Lieutenant A. J. G. Hargreaves (of my regiment), with whom I had travelled on previous occasions. He was about to proceed to England on leave, but when asked to join in my attempt to penetrate into this inhospitable land, he gladly consented.

CHAPTER II

PREPARATIONS FOR DEPARTURE

By the end of March 1903 nearly all our preparations were made, and the more cumbersome goods forwarded to Srinagar by the slow but sure bullock-carts, there to await our arrival. Our caravan-ponies, forty-three in number, were purchased in Leh, as we intended to use that place as our base of operations.

The caravan-bashi, Abdul Khalik by name, bought these ponies for us. Since his name will frequently appear in this record of our travels, it is necessary to enumerate briefly his virtues and his vices, though as time went on his many bad qualities completely overshadowed the few good points in his character.

He was an Argoon by birth, half Pathan and half Yarkandi, a Mahomedan by religion, and a sharper and bully by nature and education; about forty-seven years of age, of imposing and, to the natives of the country, of awe-inspiring appearance. He could lie fluently in seven Eastern languages, and possessed an extraordinary knowledge of the world in general. These talents were further accentuated by a most persuasive manner.

His ordinary vocation was that of an intermediary between the different merchants, of all nationalities, who visit Leh: in this position he was able to exercise his peculiar talents to the full, though numerous indiscretions had caused him to become intimately acquainted with the interiors of many prisons.

Cunning and audacity had, however, enabled him to render these visits of but short duration.

He first appears in history as a mule-driver in the service of Captain Bower, where his great capacities for lying quickly brought him into notice. This expedition evidently proved sufficiently lucrative to encourage him to seek out more "sahibs" on whom he could exercise his cunning. In 1897 fate threw him into the path of Captain Deasy, who was about to proceed to Chinese Turkestan. On this occasion, however, his villainies were quickly exposed, with the result that he was sentenced to six months' imprisonment at Gilgit.

Apparently his ardour was in nowise damped by this experience, for in 1902, when I visited Leh, Abdul Khalik, hearing that I intended to enter Tibet on some future occasion, came to me with the outward appearance of a bland and innocent gentleman and requested to be engaged as caravan-bashi. At this date I knew nothing either for or against him: no information was to be obtained from the natives beyond the statement that he was invaluable in dealing with Tibetans—they were glad enough, probably, to get rid of him at any price. Completely deceived by his manner, he was at once engaged by me, and received full instructions as to the part he was to play in the preliminary arrangements.

Hargreaves reached Srinagar about the 17th of April, while I arrived a fortnight later. The first week of Hargreaves' stay was spent by him in giving the finishing touches to the stores, repacking and sorting them for convenience in transport. All the eatables and perishable goods were packed in *yakdans* (light wooden boxes covered with thin leather). They are quite ideal for carrying stores, being light yet

strong, easy to load on ponies, and cost but 7 rupees apiece. *Chuts*, large saddle-bags made of hair, were used for carrying our flour, rice, etc.

Hargreaves left Srinagar before my arrival, and hurried forward to Leh in order to attend to the ponies and see to the fitting of their equipment, taking with him twenty-five pony-loads of the bulkier goods, such as tents, rugs, and rice.

I arrived in Srinagar on May 3rd, camping in the Chenar Bagh. The year 1903 was marked by disastrous floods, and even at this date the level of the water was several feet above the normal. Here I was met by Babu Ram Singh, the sub-surveyor, together with his cook—for Ram Singh's religious susceptibilities necessitated his having a man of the same caste to do his cooking.

I have rarely seen so marked a contrast between two men of the same country—for both were Gurkhas. Ram Singh was about five feet eight inches in height, of solid, not to say corpulent build, of placid temper, a good English scholar, and a most pleasant and interesting companion. He also possessed the quality (rare among natives of India) of dealing tactfully with men of other castes and nations.

His cook, on the other hand, was of minute stature, half starved in appearance, and cringing in manner. He was the only man in the whole of our caravan who increased in size and weight—for he proved himself to be a great flesh-eater, and, with the choicest joints of venison generally at hand, was able to spend many hours in silent gluttony.

Rajah Sir Amar Singh, the brother of the Maharajah of Kashmir, had kindly provided us with relays of coolies and ponies along the whole road to Leh, so the journey was accomplished with rapidity and comfort.

The snow on the Zoji La was, for once, firm and hard, and the climb over the pass was consequently rendered both pleasant and exhilarating.

No account of the first part of the trip is needed, as much has already been written on Kashmir and Ladak; suffice it to say that I joined Hargreaves at Leh on May 19th, after a monotonous but comfortable journey of 250 miles.

It will be here in place to briefly state the composition of the expedition, and to enumerate the stores and impedimenta which were needed for our journey into the unknown land.

Besides Hargreaves and myself, the party consisted of Ram Singh and his servant, Abdul Khalik, two cooks, two camp-men and twelve pony-men. To assist in keeping the camp supplied with fresh meat, I engaged the services of my old *shikari*, Sabhana of Wataila, a man who on several previous occasions had done good work with me in Kashmir.

For survey purposes, the instruments included one 6″ theodolite; one 3″ theodolite; two hypsometers, with four spare thermometers for registration of the altitude and graduated from 212° F. to 170° F.; four maximum and minimum thermometers; two aneroids, each registering up to 24,000 feet; two chronometers and two plane tables, with their necessary adjuncts.

Our battery consisted of two sporting rifles, two M.M. ·303 carbines, one ·500 Magnum Express, one ·450 Express and a Paradox, together with 1000 rounds of rifle ammunition and 200 gun cartridges.

For clothing, Hargreaves and I each had, in addition to the ordinary Norfolk suits, lamb's-wool under-garments, a short and light *poshteen* coat, trousers of the same material, together with Gilgit boots to slip over the feet. Large fur gauntlets, balaclava caps, woollen

comforters, puttie gaiters and heavy shooting-boots completed our outfit for use by day.

For the night we had poshteen sleeping-bags, and a plentiful supply of rugs in addition; but at times even these proved to be insufficient to keep out the bitter cold, and poshteen trousers had often to be worn at night as well as by day.

The tents consisted of an Elgin Mills 8 ft. square sleeping pal, an 8 ft. square servants' pal, a Col. Kinlock's shooting pal and four 6 ft. square servants' pals. As soon as our means of transport began to fail, both the servants' tent and the shooting tent were discarded, as neither was suited to the country.

These tents were very much improved by some additions which we devised for them. They were lined throughout with close-woven canvas cloth, and a flap of the same material, twelve inches deep, was also sewn round the bottom of the "flies" and turned in so as to lie on the ground. On this strip a rug was laid, fixed to the walls by means of tabs, thus materially assisting in protecting us from the bitter wind.

A great variety of medicines was not needed, as the ailments likely to be met with in high altitudes are but few in number: cold in the abdomen, inflammation of the eyes, sleeplessness, headache and mountain-sickness, ague and toothache, comprise the chief complaints. A small tin chest contained the necessary drugs in the form of tabloids, together with lanoline, lint and bandages, for minor accidents. These proved amply sufficient for all our wants.

CHAPTER III

READY TO START

ABDUL KHALIK, the caravan-bashi, met me several miles from Leh, bringing with him two or three of the ponies he had bought. These animals were enveloped in rugs, but no coverings could sufficiently disguise the lumbering Yarkandi pony, the one breed above all others which Khalik had been told not to purchase. Soon after reaching the comfortable dak bungalow at Leh, a visit was paid to the *serai* to inspect the forty-three animals which had been bought.

Khalik, heavily booted and spurred, gaily attired, and carrying an enormous whip, joined us, and at once proceeded to introduce the men he had engaged as caravan-drivers. They were twelve in number, all Argoons, of varying age, size, and appearance. A very few had pleasant faces; the majority looked hardened villains. The services of six were dispensed with at once, much to Khalik's disgust.

Argoons are half-castes, usually the offspring of mixed Yarkandi and Ladaki, or Yarkandi and Kashmiri marriages; they get their living as caravan-drivers, working along the different trade routes. As a rule, they are ill-fed and badly paid, looked down upon and bullied by the surrounding peoples, so that it is remarkable they retain any good qualities at all; as a matter of fact, they are not only patient, hard-working, and apparently indifferent to physical hard-

ships, but have even been known to show gratitude for kindness received—a feature not too common amongst the natives of Kashmir.

We were much disappointed on inspecting the ponies, for they were all, without exception, in a low and weak condition. Khalik declared that he had bought them all a month before and fed them fully ever since, and in proof of this statement produced a heavy bill for grain, etc.

We discovered afterwards, however, that he had bought the ponies only a few days beforehand, and had disposed of the grain to his brother, who possessed some cows which required fattening up for the market.

The distended state of the ponies' bellies showed how they had been stuffed during the last few days, doubtless with the idea that the foolish sahib might be impressed by their splendid condition. Not only were the animals in a miserably weak state, but a large proportion of them were Yarkandis, which, as I have said, we had told Khalik not to buy, as they are quite useless for the highlands of Tibet; the remainder were of various breeds—Kashmiri, Chang Tang, Zanskar and Ladaki—varying in size from 11 to 14 hands, of all colours and tempers, and having only one point of similarity, viz., their wretched condition.

Khalik was, of course, ready with innumerable explanations—ponies were very scarce and dear that year; the mortality during the last winter had been so great as to surpass all previous records; the ponies were really quite young, and only *seemed* old; teeth-marks were quite untrustworthy in that country, etc. etc. It was, however, impossible to buy fresh animals, as we wanted to start at once. We found that the saddles were ready, and the head-stalls, picketing-ropes, rugs, etc., nearly complete.



SHOEING PONIES IN LEH.



OUR CARAVAN PONIES IN LEH SERAI.

LIBRARY
OF THE
UNIVERSITY
OF
IFORNIA

On the next morning a fine little pony was brought in for inspection—reputed to be the champion polo-pony of the valley. As we could not agree upon the price, the difference was settled by the simple expedient of tossing; the owner won, and the pony became ours for 80 rupees.

May 21st was a busy day for us. We again sorted and repacked the yakdans, then engaged more men; this time all Ladakis, of whom I cannot speak too highly. They are truthful, faithful and honest; hard-working and as hard as nails; and always cheerful and willing. I may add here that from the beginning to the end of our journey not one Ladaki gave us a moment's trouble—from them we had no grumbling or sullen looks.

Many Ladaki women gathered around at this period and attracted our attention. Their general appearance is best described by Dr. Gerard, who writes as follows: "In figure they are stout, waddling and dumpy: . . . in face they are not beautiful, even when young: when past their climacteric very unseemly; and when old a picture of horrid ugliness. Their hair, glistening with rancid oil, hangs loosely round their sunburnt necks. Sometimes it is woven into tresses, which braid the contour of the face; but it is commonly unregarded, and blows out in the wind, giving them a shaggy appearance, like wild beasts."

By the 23rd of May everything was complete; the ponies had been shod—by no means a simple operation—and a cheerful and contented set of men engaged. In addition to other stores, 2000 lb. of flour, 2400 lb. of barley, 1400 lb. of rice, tea, sugar, salt, spices, etc., were bought for the party; all this was divided and packed into loads weighing 80 lb. apiece—two of which were carried by each animal.

During these few days at Leh the ponies visibly improved in condition—probably because a sharp eye was kept on their food.

We had intended to leave Leh on the 23rd inst., but as this happened to be a Saturday, an inauspicious day according to Mussulman belief, our departure was delayed by twenty-four hours: this time we spent in settling all outstanding claims, and giving advances of pay to our men. However much we disbursed to the people of Leh, there were always others who hovered around, pressing purely imaginary claims, their one idea being to get as much out of us as they possibly could. These hangers-on followed us about like vultures pursuing a dying animal, each one hoping a tender morsel might fall to his share.

Hargreaves left early in the morning for some burhel-shooting in Chimray nullah, intending to join me three days later at Chimray village.

During the afternoon the "vultures," finding that there was little else but bones left on their victims, gave up the pursuit and departed. I spent the remainder of my time at Leh with the Moravian missionaries, whose generous hospitality brightens for all visitors the dreariness of this desolate land of mountains. Very little is known of the excellent work that is accomplished by these good people; they are respected and beloved by all with whom they come into contact, and set an admirable example of simplicity and cleanliness to the natives, besides performing many practical works of charity.

The winter of 1902–3 had been a severe one in this region, the snowfall being one of the heaviest on record. The Chang La, a difficult pass of 18,000 feet, over which we had hoped to make our way, had been consequently completely blocked. However, the two

men whom we had sent forward to report on the state of the road, returned in time to bring the information that this Chang La route was now just practicable. This was indeed good news, for by crossing the pass a fortnight's weary marching would be saved.

CHAPTER IV

THE JOURNEY BEGUN

THE 24th of May broke clear and bright. At the first streak of dawn all were astir, but though we worked like Trojans to get things ready, it was nearly eleven o'clock before the ponies were actually clear of the dak bungalow.

As is only to be expected in all Eastern towns, a large crowd had collected to see us off, and there were plenty of onlookers who were only too willing to assist in the loading of the ponies. Much to our surprise, the animals submitted quietly to the indignity of a load with the exception of two squealing stallions, which fought most determinedly with their human oppressors. They were, however, mastered at last, and loaded with bags of grain in such a manner as to discourage even the most playful animal.

Having marshalled our caravan, we finally set out from the dak bungalow, escorted by a considerable crowd for some distance beyond the town.

For the first mile or two the ponies behaved admirably, and we were just congratulating ourselves on the success of our start, when one pony, in spite of all our efforts, broke back, and made straight for Leh. His example was immediately followed by five others, and we had the mortification of seeing all six disappear round the hill in a cloud of dust. No ropes could stand the strain of such proceedings, and yakdans,

tinned foods and saddles littered the road in all directions.

Back we went in pursuit, and after a long chase the delinquents were caught and persuaded to return to the remains of their loads, but not before one of them had fully demonstrated his not inconsiderable racing abilities. After this one slight mishap, the rest of the march was completed without trouble.

A dark lurid haze hung over the valley during the day—the air being full of dust, probably the result of a sandstorm in the plains of India.

The first night was spent in the rest-house at Ranbirpur, at which place a decisive victory had been gained by Zarawar Singh, the general of Raja Ranbir Singh, over the Ladakis in 1841.

The next morning we started early. The packs were rapidly and efficiently adjusted by the Ladakis and Argoons, who vied with each other in an exhibition of quick loading. Long practice enables these caravan-drivers to reach a very high pitch of excellence in this most important work.

The road from Srinagar to Leh is good, but beyond Leh it becomes heavy and rocky, and strewn with granite boulders, so that travelling both for man and beast is by no means easy.

Chimray was reached in a snowstorm. Here we were joined by Hargreaves, who had been unlucky in his search for burhel, as he had not sighted a single animal.

Outside the village we were met by a charming old *lumbadar*,[1] evidently very anxious to oblige, though he did not appear to be blessed with a large amount of intelligence, and even of this small stock he seemed to be deprived at the sight of Khalik.

[1] Lumbadar = headman.

For some reason or other, Khalik struck fear into the hearts of all these poor people. Grass, grain, eggs, etc., had been collected beforehand, so it was not long before all were comfortably settled down for the evening.

Twelve miles distant, at tha head of the valley, was the Chang La (18,000 feet), a trying pass at all times of the year, for not only is it usually deep in snow, covering innumerable large, loose boulders, but it also has an evil reputation for mountain-sickness. Our guides had informed us that it was practicable, but a further report received in the evening on the condition of the snow was not very encouraging. We had, however, a large number of yaks at hand, so it was decided to load these up with half-loads, and allow the ponies to cross the pass unburdened.

Our next halting-place was Zingral, a flat spot of about twenty acres in extent, situated on the near side of the pass, 2200 feet below the summit; the road leading to this place lay along the river-bed, as the ordinary path, high up the mountain-side, was still under snow.

We found here the remains of a hut which previously afforded a welcome shelter to belated travellers; only the walls and a part of the roof are now standing. We also obtained good water, but all grain, wood and grass had to be brought up from the village below. Our encampment that night appeared rather formidable, consisting as it did of about 150 men and 120 animals —many of the men having volunteered their services merely to assist the yaks and ponies in the passage of the Chang La.

We rose at 3 a.m. the next morning, with the idea of reaching the top of the pass, if possible before the sun had begun to melt the snow; the baggage

was loaded by the light of the stars, and after a hard struggle up the western slope the highest point was gained before the sun rose over the eastern peaks.

All were somewhat exhausted by this climb, but though the going had been bad, it was nothing compared with what was before us. For seven or eight miles down the eastern side of the pass the snow lay fifteen to twenty feet deep, and though the surface had thawed during the previous day under the heat of the sun, yet it had frozen again during the night. The result was that a crust had been formed which was firm enough to support a man, but nowhere sufficiently strong to bear the weight of a baggage animal, with or without a burden.

This brittle covering broke as the weight of an animal was thrown on each leg in turn; a quick, sharp scramble ensued, leaving the panting beast, with his belly on the crust and his legs in the soft snow beneath, quite powerless to help himself. We counted twelve ponies in this predicament at one time. The method of procedure that was adopted as a means of rescue was as follows: The animal was seized by the tail, ears, mane and rug, and forcibly hauled from his temporary grave, only, however, to be in a similar position five minutes later. This continual struggling not only weakened the ponies considerably, but cut their legs and faces badly; so much so, indeed, that a clearly marked trail of blood indicated the route taken from the top of the pass.

Fortunately the day was cloudless, without a breath of wind, so, although both men and beasts were much exhausted, we managed with sundry halts to make our way down the valley, and by two o'clock in the afternoon had left the snow behind.

The yaks had displayed their wonderful powers

of surmounting difficulties in the way of bad going; they felt the strain, certainly, but even when carrying 160 lb. loads proved themselves far superior to the unburdened ponies. Their capacity for struggling through deep and broken snow, over protruding rocks and treacherous hollows, is most marvellous.

Many of the men suffered severely from the effects of the great altitude. This "mountain-sickness" is a peculiar disease, which affects different individuals in different ways and with varying intensity. The more common symptoms are severe headache, particularly affecting the back of the skull, giddiness, vomiting and great exhaustion. No certain cure has yet been discovered for it, but undoubtedly the best remedy is to get to a lower altitude as rapidly as possible. A good preventive is to eat frequently small quantities of food — and for this chocolate is invaluable. It is a remarkable fact respecting this unpleasant malady that it appears to attack its victims more severely on certain mountains and passes than on others, though the circumstances and surroundings may be precisely similar. One may, however, become immune to it in time.

On reaching Durgu, we were met by a bevy of young girls, nicely dressed and washed for the occasion; now that they had removed the covering of dirt from their faces, it was surprising to see what fresh, rosy complexions the younger girls possessed. These fair damsels offered us milk, eggs and native beer, while one of them discoursed sweet music for our benefit on a flute of primitive but ingenious design. A rest-house had been well cleaned and prepared, and in this we were soon installed, though it was long after dark before the last stragglers of the party came in and all was quiet for the night.

A short march of eight miles along the grassy



WOMEN OF TANKSE SIFTING GRAIN

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

banks of a stream took us next morning to Tankse, the chief village of the district; it is a wealthy and prosperous place, famous for the large quantities of fine wool produced by its herds of goats.

The Tankse district consists mainly of a long, fertile valley, cut off from the rest of the world for the greater part of the year by an impassable barrier of snow. A broad and rapid river, full of snow-trout, runs down the centre of the valley, its banks soft with rich grass. From end to end there are fertile meadows, and substantial stone houses are dotted along the lowlands, the whole encircled by rugged snow-peaks.

On entering the village, the first object my eye fell upon was the smiling face of Soonam Tilney, a native of the place, who had accompanied me into Tibet in the previous year. He earnestly requested to be allowed to join our party, and to this we readily agreed, as he was known to be a quiet and steady worker.

Our first inquiry on arrival was respecting the grain ordered some ten days before; to our intense disgust, we found that not a bag was ready, not a pound weighed! The *khardar*, or headman of the district, Hiram Singh by name, was at once produced, and we endeavoured to impress upon him the fact that we were waiting for the promised grain. He was, physically, a fine specimen of the native, but as he habitually drank *chang*[1] with a perseverance worthy of a better cause, most of his time was spent in happy oblivion. We were unfortunate in meeting him on one of his bad days, for all he could do was to refer us to the grain-store keeper, from whom we received a promise that, 1180 *maunds*[2] of barley should be ready by the next day.

[1] Chang = native beer.

[2] Maund = 80 lb.

We had determined to buy some yaks here to carry grain for the ponies, intending to let them run loose or return to their homes, as their loads became used up. We found, however, that the people were unwilling to sell, and arrangements were made to hire the animals instead. The rate of hire was the same as for ponies, viz., Rs. 15 a month, halting or marching, the owners feeding and tending their beasts and taking all risks.

We turned in early that night, with the intention of rising betimes the following morning to superintend the weighing and packing of the *grim*, a coarse kind of barley. All our plans were frustrated, however, for neither lumbadar, storekeeper nor workers appeared until the sun was high in the heavens.

The grim was removed from the storehouse through a small hole in the roof; it was then cleaned and hand picked (to remove the stones) by two rows of very dirty women; after that, it was weighed. The process of weighing was begun in the largest scale the village could produce, a small hand-scale, with a 4 lb. stone as weight; with this it was proposed to issue over 14,000 lbs. of grim—an operation which would have entailed a week's steady work.

A search was instituted through the village, and an 8 lb. measure discovered; this was a decided improvement and the work now proceeded comparatively fast; but by nightfall barely 100 maunds were ready. We were obliged to watch the men and women while they worked, or they would have emulated the fat boy in *Pickwick* and dropped off to sleep at once.

Throughout the day Sabhana was collecting birds for our table; from this time, indeed, birds, game etc., were shot for the pot, and not merely for sport. When cartridges are scarce and there is no possibility

of replenishing the stock, it is desirable to obtain the largest bag with the smallest expenditure of ammunition. Acting on this principle, we always told off Sabhana for a stalk when game-birds were plentiful, as he usually secured a good percentage; if he made a miss, or if his bag did not come up to our standard in quantity, he received no share of the spoils. He was allowed one cartridge to four pigeons, one to two Tibetan sand-grouse, and one to every hare. Sabhana thus became thoroughly well versed in the efficacy of enfilade fire, and much time was spent (more particularly with the pigeons) in getting a nice row of the birds—one behind another.

By the evening of the third day a fair number of yaks and a few ponies had been collected; the latter were a ragged-looking lot, but as I had used some of them the year before, I knew that they were in reality much hardier than they appeared.

We left Tankse on May 31st, and travelling along a grassy valley arrived early in the day at Muglib—a distance of only eight miles, but the length of our marches had to be regulated by the places where grass and water were to be found. Moreover, the pace was necessarily slow, as the yaks, which carried the spare grain, are never quick movers at the best of times, and at this period were so weak that their rate of progression never exceeded 1½ miles per hour.

As soon as we arrived in camp the ponies were turned loose, in order to allow them to stretch their limbs by a good gallop over the grassy plain—a proceeding which they hugely enjoyed; we had, however, to recapture the stallions at once, as their fun speedily degenerated into an ugly fight, in which one received a bad wound in the side.

The stream was teeming with snow-trout, and since

hunger overcame our natural sporting instincts, we dragged a pool with a half-inch mesh net, with the result that over 10 lb. weight of fish were handed over to the cook.

On the following day we reached Phobrang, the last civilised spot we should see for months. It consists of about eight huts, lying in a sheltered nullah to the north-east of the Pangong Lake, at an altitude of nearly 14,500 feet. It is inhabited all the year round, but the people must experience the most bitter cold, for the deep salt lake of Pangong, which lies 600 feet below the village, is frozen hard for three or four months in the year.

A strong stream, rising in the mountains close by, flows through the flat, grassy lands in front of the village and empties itself into the Pangong Lake. This river was alive with fine snow-trout, so Hargreaves and I at once set to work to catch them. It was an ideal trout-stream—the swift water broken into eddies and pools by sharp-angled rocks, and the sight of the game, hard-fighting fish made us long for a light ten-foot rod. The net proved too short to be of use, so we proceeded to poach, in spite of the bitter cold, in the regular native fashion. Wading down the river, the fish were frightened into taking refuge under the over-hanging and broken banks, where they lay in dense masses with their noses close to the shore. In this position it was an easy matter to grasp them gently round the gills and cast them high and dry on the bank. I am sorry to have to record that by this unsportsmanlike trick we captured in the course of the afternoon 250 trout, averaging 1 lb. in weight, the largest turning the scale at 2 lbs. From one hole alone, about six feet by three, the cook and I drew out 150 fish. These were at once cleaned, sun-dried,

and then strung on ropes, thus making a welcome addition to our larder for many a day afterwards.

We had been told that we should find everything ready at Phobrang, and baggage animals collected; but we were again doomed to disappointment, for not a single beast of burden was to be seen. The people seemed listless and sulky, and declared that there were no animals in the district at all. The winter had certainly been a severe one, but even that would not account for the total disappearance of the large herds of yak, ponies and donkeys which I had seen grazing on the low-lying flats in the previous year. We were quite unable to account for this state of things and called upon Khalik for an explanation; he at once declared that the natives had bribed the khardar not to compel them to go with us. This, however, only increased the mystery, as these same people had been willing enough to go last year, and had appeared to be well satisfied; moreover, we required them this time for only thirteen marches, and were offering baksheesh in addition to their pay. It was not until four months later that we discovered that it was Khalik himself who was at the root of the trouble. He had so intimidated the unfortunate villagers that they had handed over to him money, sheep, wool and clothes; he had also told them that we were going to China and that if they went with us, they would never return—there was, therefore, some reason for their reluctance, though we were at a loss to account for it at the time.

A long conversation with the khardar and the lumbadars in the evening resulted in a promise that a search should be made the following morning for the necessary animals, and if found they should accompany us on our journey.

The morning broke fine and bright, and our hopes of getting off on the succeeding day rose with the sun. Yaks of a starved and ragged appearance began to come in early, continuing to arrive in small herds for the rest of the day, until by nightfall they had gathered to the number of seventy. With the ponies we were less fortunate, as only ten fresh ones put in an appearance, and these in such a wretched condition as to give but little hope of their doing much work.

Further delay followed, as the men asked for a day to collect provisions for themselves and their ponies and to get their animals shod; this seemed such a reasonable request that we could not very well refuse.

Our last day in civilisation was spent in testing the rifles and ammunition. In the afternoon we were visited by a herd of *kiang*, the wild ass of Tibet; this particular herd had evidently seen much of man and knew his evil ways—for, though curious as to the nature of our unusual assemblage, they soon left.

The scene from the camp at twilight was strikingly beautiful. In the distance rose the snow-covered mountains of the Pangong, their tops flushed by the last rays of the setting sun; a few small clouds of varied and brilliant hue floated in a sky otherwise intensely clear; in the foreground were the ponies, picketed in rows, and herds of yak and sheep, while here and there thin columns of blue smoke straggled upwards from the fires around which the men were having their evening meal. The stillness was unbroken save for the gurgling of the rushing river and the tinkling of the animals' bells.

CHAPTER V

LEAVING CIVILISATION

On the 3rd of June we left Phobrang behind, and with it the last signs of civilisation.

Our party now consisted of our own twenty men and forty-three ponies, together with sixty hired yaks, fifteen ponies, thirty sheep and about twenty-five drivers. The people of Phobrang, moreover, lent us a big, savage-looking dog, which accompanied us throughout the expedition. Though continually coaxed and fed, he never once gave us a gentle glance or a wag of his tail; he waxed immensely fat, and consequently proved quite useless as a watch-dog. His main delight lay in sleeping in the full blast of the bitter wind with the snow beating against his shaggy body.

We camped that night at Chorkangma (16,950 feet), and, as may be imagined, the cold was intense. The appearance of the country underwent a further change: in the Sind Valley we had found great, rugged, timber-covered ranges; from the Zoji La to Tankse, the wild, barren mountains of Baltistan and Ladak; and now we were among bleak, desolate hills of moving shale, the great height of the hills being dwarfed by the altitude of the valleys.

In front was the Marsi-mik La, a pass 18,400 feet above sea-level, covered with snow for nine months in the year, but with easy gradients on either side. We started next morning on the ascent, and for the

first two or three hours made but little headway, as the snow was soft and deep and the ponies floundered badly. The only way to make any progress was by short, quick rushes which proved most exhausting. The sheep showed themselves to be even worse travellers over the soft snow than the ponies, for when once down or only partly stuck, they made no effort to free themselves. On the other hand, the mad efforts of the ponies to extricate themselves frequently resulted in their becoming even more deeply embedded in the treacherous snow.

As we ascended, clouds came rolling up from the west, becoming more and more threatening as we neared the top of the pass. Immediately after the summit was gained, snow began to fall drearily and monotonously, until by noon the direction of our advance could hardly be distinguished. The snow was accompanied by a biting south-west wind which froze us to the bone, and the last few miles of that day's march was a miserable and painful crawl over loose, sharp, and half-hidden boulders.

Hargreaves' riding-pony, a big grey Yarkandi animal, which he had been leading throughout the day, collapsed several times during the latter part of the march, and only retained just sufficient strength to enable it to reach the camping-ground. On careful examination, it appeared to be suffering great pain, whilst the tongue was discoloured and the blood very dark. Khalik soon appeared on the scene, full of importance, and pronounced the case to be one of grass-poisoning. Seeing, however, that the pony had not even seen a blade of grass for many hours, this did not seem a very probable theory. Khalik was quite confident that the animal would recover if operated on, and as it seemed to be in great pain, which we



HARGREAVES AND HIS PONY ON THE MARSI-MIK LA, 18,300 FEET.



THE MORNING OF DEPARTURE FROM TANKSE.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

had no means of alleviating, he was allowed to try his hand. The pony was accordingly thrown, and Khalik proceeded to remove a portion of the gristle near the nostril, rubbing in salt and some yellow powder and sewing up the wound again. In spite of this drastic treatment, and much to the operator's surprise, the animal died very shortly afterwards.

The snowstorm continued steadily throughout the afternoon, converting the camping-ground into a veritable quagmire. As the baggage animals straggled in, they were unloaded and the burdens deposited on the ground, only to disappear rapidly under the all-enveloping snow. The cold was intense, not so much on account of the 15 degrees of frost registered by the thermometer, as from the searching wind which tore down the valley with tremendous force, almost sweeping us off our feet. Snow fell at intervals all that night, but happily the wind gradually dropped.

When we rose next morning the country was shrouded in a thick mist, and the shivering and hungry ponies had gathered round and between our tents, in the hope of finding companionship and warmth.

A start was made under these miserable conditions, but very soon the sun burst through the veil, the clouds rolled away, and the genial warmth rapidly melted the snow. We steadily descended the farther side of the pass, making our way first alongside the nullah and afterwards in the river-bed itself, and halted at Pamzal, on the Changchenmo[1] River.

On arrival in camp, the ponies were unloaded and tied up, head to tail, for about fifteen minutes to cool. They were then turned loose and wandered where they pleased in search of food; half an hour before dusk they would turn their heads homewards, moving faster

[1] Chang-chen-mo (valley leading to the desert).

and faster as they drew nearer. On arriving at the camping-ground, the grain would be given out and placed in nosebags, five of which were taken by each man. During this process of distribution, the ponies would stand round in a ring, pushing and squealing, each one trying to edge in a little nearer to the grain than his neighbour; those in front — generally the strongest — were kept back by raps of a stick, while those behind, receiving no correction, pushed and struggled all the harder.

When all was ready, the pony-men picked up their bags together and dispersed. A wild scene of tumult followed. The men shouted for their own particular animals; they, knowing their masters' voices, jostled after them, neighing, biting and kicking. Then the nosebags would be quickly slipped over their heads, and a sudden calm would ensue—not a sound being heard but that of steady munching. It was a scene that we never tired of watching, and when the days came when the grain failed, we were almost as disappointed as the ponies themselves.

At Pamzal there was but little grass to be found, and the ponies fed off the dead leaves of the shrubs which grew all along the banks of the river; the yaks, however, were more fastidious, and consequently had nothing to eat that day. The wood of these shrubs burned brilliantly, and it was appreciated all the more as we knew it would be the last we should see for a long while.

Turning eastwards from Pamzal, we made our way up the valley of the Changchenmo — ascending by almost imperceptible degrees to the Lanak La, the pass separating Ladak and Tibet. The valley itself is broad, and flanked on either side by rolling mountains and grass-grown nullahs, once celebrated as the

haunt of the ovis ammon and the yak. For the greater part of the year a west wind tears through the valley with such force that it is well-nigh impossible to make headway against it. Down the centre an icy torrent flows over worn and ever-shifting boulders, the rush of water continually forcing the smaller rocks to take up a new position lower down. The river was also full of ice and snow, whilst here and there snow-bridges spanned the rushing water. These causeways proved invaluable, as we were compelled to cross the river several times, and only in one place was much difficulty experienced. Here the river ran close under a precipitous cliff, leaving a bare two-foot space between the rock and the perpendicular ice-wall of the river itself; this narrow way was found to be too small for the laden animals to traverse, and consequently the protruding rock of the cliff had to be knocked off—a proceeding which took a considerable time. Fortunately no casualties occurred, owing to the skilful and energetic work of the drivers, who pulled, pushed, and held up the animals in the most wonderful way, when a single slip would have meant the total loss of beast and baggage.

The climatic conditions prevailing during our passage through the Changchenmo Valley would be completely altered six weeks later; snow, mist and biting winds giving place to flowers, luxuriant grass and blazing sunshine.

Kyam, our next halting-place, is situated on an extensive plateau, 100 feet or so above the river. Numerous streams so irrigate the valley that excellent grazing is produced during the summer months. On our arrival, however, it was found that the whole of the feeding-grounds were still covered with snow, and little grass was to be seen. Hot springs bubbled

forth from the mountain a little to the south of our camping-ground; these were impregnated with sulphur and soda and discharged a considerable amount of water into the river—the temperature of the springs varied greatly, the hottest registering 125° F. The heat produced appeared to have but little effect on the surrounding snow, which lay deep right up to the margins of the springs. We decided to halt a day at Kyam to enable the hired transport, of which the greater part was still on the road, to overtake us. The winter had been exceptionally severe and long, and as the Ladakis make but little provision for the wants of their animals, they were thin and weak, and only equal to light loads and short marches.

On the first day of our stay at this place we experienced the full benefit of the west wind; the tents strained under the howling blast and yakdans and rocks had to be placed on the pegs to prevent them from being torn out of the ground, and with all this raging hurricane not a cloud was to be seen in the sky.

Hargreaves went into my tent after tea and found that the fowls had taken possession of the bed, there being great competition for sleeping accommodation on my pillow. Two, bolder than the rest, refused at first to give up possession, and on being ejected, crept in again under the flies of the tent. Their perseverance, however, cost them their lives, for they decorated our dinner-table in the evening.

Our brave Kashmiris, who had been boasting of the dangers they would face in our service, began to feel a little nervous, now that we were close to the frontier, as to what would happen should we encounter any Tibetans. Sabhana, the shikari, was the first to show the white feather. He came to us in

the evening, asking for leave to return to Kashmir; not, as he explained, that he was afraid of any man, but feared that his health would give way, and he was reluctant to be a burden to us. His request was refused, as we considered that it would be a bad precedent to allow him to go; though, as it happened, it might have been better for us had we sent him back with several others of his kidney, for they eventually proved quite useless, doing no work and eating large quantities of precious provisions.

Our halt at Kyam proved disappointing, for only ten animals with twenty maunds of grain came into camp. This grain was washed and sifted, and when dry was placed in the ponies' saddle-bags together with chopped straw. These saddle-bags are called *taquals*, and, when filled in this manner, act as an extra pad for the animal's back, and provide several additional feeds in case of emergency.

By the evening of the second day only half of the hired transport had put in an appearance, but we determined, nevertheless, to start on the morrow, leaving a man behind with orders for the stragglers to follow us to Arport Tso where we would await their arrival for eight days.

From Kyam a short and pleasant march of seven miles brought us to Kepsang nullah. We were much struck by the varied and brilliant colours of the mountains, their slopes covered with patches of boortsa, a diminutive shrub which only flourishes at high altitudes. Though this bush rarely exceeds nine inches in height, yet its long fibrous roots afford excellent fuel, and so it is always a welcome sight to the traveller—indeed, without it, man would find it very difficult to exist at all in this country.

Several female antelope were seen in the neighbour-

ing ravines, but bucks were scarce. Innumerable hares inhabit the stony hillsides, and afford but poor sport on account of their extreme tameness; their flesh, too, provides very indifferent eating, being almost tasteless.

Before it was light the next day we were awakened by a mounted messenger who had ridden post-haste to overtake us; with the usual consideration shown by natives in authority, he had borrowed a pony from the last collection of huts and had ridden it to death on the road. He brought two telegrams—one announcing the fact that Hargreaves had won the Regimental Derby Sweep; the other from an official who wished to be kept informed of our movements—a request difficult to comply with, insomuch as these depended on the presence of water and grass.

During the night one of our ponies died, and on our arrival in Zaroul another, also a Yarkandi animal, succumbed. The symptoms displayed in each case were very similar, the poor beasts being seized with sudden staggering whilst feeding, then rolling over and over on the ground, and dying within half an hour. The mortality among the ponies was probably the result of the altitude at which they were living, and indeed, seeing that they were born and bred in Chinese Turkestan and had never, except on the one occasion when they crossed the Karakoram Pass, reached a height of 2000 feet, it is not surprising that a sudden change to 17,500 feet above sea-level should have an injurious effect upon them.

Early in the morning we sighted a herd of five kiang. I was particularly anxious to obtain a good specimen of this animal, and it was desirable, for two reasons, to get it early in the journey; in the first place, it would be more likely to possess a good coat, and in the second place, the skin could be sent back



WESTERN TIBET SCENERY.



YAKS CROSSING AN ICE BRIDGE IN THE CHANGCHENMO VALLEY.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

at once, thus avoiding the necessity of adding more weight to our already heavy loads.

By the simple expedient of walking very slowly and steadily towards them, and thereby arousing their curiosity,—a very strong trait in their natures,—I succeeded in getting within 100 yards, when a bullet from the ·303 placed just behind the shoulder, dropped one of them dead on the spot. The kiang was about five years of age, in splendid condition and without a blemish. The amount of fat he carried was astonishing, considering the almost entire absence of vegetation in the valley. A description of the kiang and his habits will be found in the Appendix.

On June 10th we made thirteen miles—a most miserable march; a strong west wind was blowing up above, whilst an easterly wind, accompanied by snow and hail, swept along the ground, the cold being so intense that a halt was called some three miles short of the intended camping-ground.

On the way, the camp-dog—the big, shaggy beast from Phobrang—spied and chased a wolf which was following our sheep; the wolf met the charge and a sharp rough and tumble ensued, but before we could reach the combatants, the wolf beat a hasty retreat, whilst the dog, though quite unhurt, showed no inclination to follow his adversary, even when we offered to support him. This wolf was a large, upstanding beast of the red variety (now changed to a winter grey), with the black tip of his tail distinctly visible against the snow.

Still further diminished in number, the hired transport came into camp during the day, two of the ponies having died in the night, one stage back; our anxiety was increased on hearing from one of our own men that the owners of six ponies,

soon after leaving the last camp, had thrown away their loads and deserted with the animals. This was disconcerting intelligence, but it was obviously useless to send back for these abandoned stores, as we could hardly trust the hired men we still had with us, and should they desert, we should be in a very awkward fix. All that could be done was to see that the most valuable stores were packed on our own ponies and the coarser grain on the hired animals. We had left Phobrang, eight days ago, with seventy animals, and were now reduced to thirty-six.

We were, however, unable to convince ourselves even at this stage that these men could deliberately intend to desert us, and comforted ourselves with the hope that they would all rejoin at Arport Tso within a few days of our arrival. Our own men, meanwhile, were working honestly and well; they did not seem to be at all disheartened by the dreary prospect of snow which stretched in an unvarying white sheet to the eastern horizon, or by the loss of the reserve supplies of food.

On the following morning—June 11th—the weather had improved; there was not a cloud in the sky, and the sun thoroughly warmed both man and beast—not, indeed, before they needed it, for a night in the snow with 24 degrees of frost is enough to cool the most ardent spirit. We breakfasted, or rather attempted to breakfast, at daybreak, little impression being made on the eatables as everything was frozen hard.

A four miles' march brought us to the Lanak La, 18,000 feet high. The ascent was easy, so the tents were pitched that night but a few feet below the summit of the pass and about seven miles beyond the boundary pillar between Ladak and Tibet.

CHAPTER VI

ACROSS THE FRONTIER

ACTUAL cold as registered by the thermometer is in itself not often unbearable, but when accompanied by a howling, biting wind, one's powers of endurance are taxed to the utmost. Such was the wind that blew upon us that night on the Lanak La, and, indeed, almost every day for the first month of our journey. The intensity of the cold was evidenced by the fact that our ink-pot burst during the night, the spilled contents being frozen solid on the outside of the bottle before the ink had time to run down the side—an inauspicious omen of what was in store for us.

We started on our way through desolate scenery, without a sign of any vegetation; the road traversed three wet, barren plains intersected by rocky ridges, while all around lay patches of half-thawed snow. Many doe antelope, most of them with young, were encountered on the road and near the camp; it is difficult to imagine how they exist in these barren regions. We camped in a side nullah called Bookchang, where it had been our original intention to halt for a day, but the scarcity of fodder compelled us to push on. Snow fell steadily all the afternoon and the cold became more intense than ever.

To add to our misfortunes, trouble arose between some of the men; the Argoons and Kashmiris had been continually quarrelling—each believing the other

to be a villain, distrusted him accordingly. This ill-feeling culminated at Bookchang in a request from both parties to be allowed to return; we were obliged, however, to discountenance this idea pretty strongly, much as we should have liked to dispense with the services of several of the men.

Ram Singh here left us for a few days, as he wished to survey a portion of the Aksai Chin or White Desert, which lies to the north of the Lanak La.

Our sheep were rapidly diminishing in numbers, so the following day I determined to take a roundabout way across the spurs in the hope of finding something to shoot, and accordingly left the caravan which was to make its way direct to our next halting-place.

Within an hour of leaving camp I discovered a fine herd of antelope grazing in the bed of a nullah, but in such a position that it was evident they could not be reached by stalking. I could get no nearer than 400 yards, so lying down, waited in the hope that they would feed towards me; presently I saw a small, dark object moving on the farther side of the antelope and gradually approaching. With the aid of the glasses I discovered this to be the head of my friend Hargreaves, whom I had left with the caravan, as he had been suffering from fever the night before. He had seen the herd from the road, however, and the sportsman's instincts overcoming the weakness of the invalid, had started on a stalk on his own account.

I speedily perceived that he, too, could get no nearer, and that as the bucks showed no inclination to move, I should have to make a bold attack across the open. Adopting this course, I got to within 300 yards before my presence was noticed. The herd then became alarmed and took to flight, but a foolish halt on their part and a lucky shot on mine, resulted

in my bringing down a fine beast carrying 24-inch horns. The carcase was strapped across the riding-pony, and a start was then made to rejoin the caravan. On arriving at the place previously fixed on for our camp, the men were found wandering about the country searching for water, as the spring beside which we had halted in the previous year was quite dried up.

No water being found, the tents were pitched close to two hills, known as Tobomorpo, whence the stronger ponies were despatched to fetch ice and snow from the neighbouring mountains.

We were now encamped on Soomjeling Plain which stretches away to the east for nearly eighty-five miles. It lies at a height of 17,500 feet, has an average width of about eight miles and is bounded on the north and south by jagged mountain ranges, the southern covered with snow, while the lowlands are dotted with salt and fresh water lakes.

Within comparatively recent times the entire valley formed one vast inland sea, of which the ancient shores are distinctly visible far up the mountain-sides; indeed, so clearly are the old beaches defined in certain parts, that it appears at first sight as if the water had only disappeared within the last few years, whilst in many places the remains of fresh-water molluscs are to be found. With the exception of the hardy boortsa and a wiry kind of grass, there is very little vegetation on the plain, but on the slopes of the hills other grasses and various mountain plants are to be found in abundance.

The red hills of Tobomorpo form prominent landmarks in the plain; lines of stones, used by the nomads for laying antelope snares, run from them in all directions. In September, men from Ladak, Rundore and Rudok meet here for the purpose of barter, employ-

ing their leisure hours in trapping and killing large numbers of antelope—bucks, does and young being slaughtered indiscriminately. The men attach nooses of string and twisted hair to the stones, spread bhoosa or chopped straw over the ground, and then drive all the animals within a radius of ten miles to the spot, where the unsuspecting beasts fall into the traps and are despatched at leisure.

We halted for a day on the plain, but to our great disappointment none of the yaks, and only ten of the hired ponies, put in an appearance. Storms swept over the valley at intervals, and as the thermometer seldom rose above freezing-point, the snow had little chance of thawing.

Along Soomjeling Plain the caravan moved to the sheltered valley of Kamure, where, though the snow continued to fall, we were much less troubled by it, On the way. Tsaggar[1] Tso was passed, a lake of the richest blue, with a calm, unruffled surface and banks of almost solid salt, dazzlingly white, whilst old grass of a rich yellow bedecked the hill-slopes above. On the north and south rose jagged and rounded mountains of every imaginable colour, their summits crowned with snow.

Much trouble was experienced with Khalik at the conclusion of each day's march as to the treatment of the ponies; he insisted that it was the custom in Ladak and Chinese Turkestan to tie up the ponies head to tail in pairs and keep them thus for two hours. The ostensible reason for this was that it enabled the animals to cool before feeding, but in reality the arrangement was intended to benefit the men who were able to get their tea at once and in comfort. We pointed out that the ponies were deprived of two valuable daylight hours for grazing, that they had to

[1] Tsaggar = salt.

feed longer at night in consequence, and thereby lost valuable hours of rest. Being determined to have our way in this matter, we insisted on a ten to fifteen minutes' halt only, after which the ponies were cast loose—with the result that the caravan-ponies looked well, and, considering the length of their marches, kept very fit. The point, however, had to be pressed home every day, so powerful is the force of the Eastern custom.

On June 17th we encamped at Chutzai, twelve miles from Kamure. It was a glorious day, but the force of the wind was so great that it was found impossible to put up the tents; indeed, it was as much as the men could do to keep their feet.

We encountered but few antelope in the day's march, but saw some hares and a wolf or two prowling about, well out of range, and large numbers of marmot-like and tail-less rats, bold and impudent. Of birds, the lammergeiers were fairly numerous, as also was a brown bird very like the English lark, while, whenever an animal was shot, the raven was always to be found perched on a rock close by, his beady black eye glistening with anticipatory satisfaction over the coming repast. A white butterfly, and lastly, the common fly, completed the list of fauna seen by us—a somewhat remarkable one considering that they were found at an altitude of 17,500 feet.

A mile beyond the camp a hot spring of 105° F. was found, and, close by, many pools varying in temperature from 70° to 80°. Rushes were plentiful, and shrimps and fresh-water molluscs abounded in the clear, crystal water. We were sorely tempted to indulge in a bath, but the keen wind was sufficient to cool our ablutionary ardour and reconcile us to a state of uncleanliness.

The following day we were cheered by bright sunshine, which deprived the biting wind of much of its sting; the march was long and tiring, however, as the débris from the valleys, carried along by the melting snow, has spread across Soomjeling Plain, leaving treacherous and boggy patches behind in which the ponies sank to their hocks. We maintained a good pace, nevertheless, traversing eighteen miles in the day and arriving before dusk in time to have the satisfaction of seeing before us in all its beauty our first goal, Arport Tso.

CHAPTER VII

DIFFICULTIES AND DANGERS

ARPORT Tso has an area of about fifty square miles, the greatest length being from north to south; it is irregular in shape, and the surface is broken by four rocky islands, covered with vegetation. It is shallow, but unlike many of the Tibetan lakes, does not appear to be diminishing in size; the water at the northern end has a slightly brackish flavour. There is no visible outlet for the surplus water, and though we travelled completely round it, were for a time at a loss to understand why the surface neither rose nor fell; Hargreaves, however, subsequently discovered that the water escaped by an underground channel, about one march distant to the east-north-east, bursting forth with great violence, and forming a river of considerable size and sufficient depth to prevent ponies wading through.

On looking south across the glittering waters of Arport Tso, one is at once struck by the bold and unusual contrast of colour. The mountains are composed of a coal-black soil, and the upper half of the range is covered by a permanent snow-field; the black slopes, moreover, are seamed by glaciers which descend to the level of the lake.

We pitched our camp at a charming spot on the western shore of the lake, fairly well sheltered from the wind. Grass grew abundantly everywhere, and

antelope were grazing in all the valleys. The surface of the lake was dotted with brahmini ducks and bar-headed geese, and innumerable larks filled the air with their joyful song.

At this camp three days were spent in the hope that the hired yaks which were on the road would rejoin with their much-needed loads of grain, flour and rice; we were again doomed to disappointment, however, for we could see no sign of them and were beginning to fear that their owners had deserted, although Khalik was quite confident that such was not the case and that they would arrive almost immediately.

Ram Singh joined the party during the second day, having surveyed a considerable stretch of country to the north; he had come across a fine, open plain north of Chutzai, a few miles from our track, with a plentiful supply of grass and water, whilst herds of wild yaks, burhel and antelope were so inquisitive and tame that it was evident they had no fear of man.

During our short halt most of the time was spent in overhauling stores and in doctoring the ponies. Hargreaves bagged a few bar-headed geese with the rifle, the gun being found quite useless as he could not approach sufficiently near these wily birds. While also wandering along the shores of the lake on the look-out for a shot, I almost stepped on a lark's nest containing three hatched eggs. It is extraordinary how the fledglings can exist, seeing that they are born at a height of 17,500 feet and exposed to the full force of the bitter wind and driving snow, while the thermometer registers 17 to 18 degrees of frost every night.

On the last day of our halt the weather became wilder and more threatening. We again repacked the

yakdans and managed by rearrangement to dispense with three of them, but little was gained by this, as one of the ponies died during the night from the cold. There was no lack of care, as each animal had its own thick saddle, a rug, and a *jhool*.[1]

We now matured our plans for the immediate future. It was arranged that I was to proceed in a south-easterly direction, taking with me Ram Singh, Khalik, one cook, twenty-three ponies and their drivers, and seven of the remaining nine maunds of grain. We were to make a circuit of from thirteen to fourteen days' duration, finally halting at a small hill on Antelope Plain, the farthest point east visited and surveyed by Captain Deasy. Hargreaves was to remain at Arport Tso for another five days, collect and sort the hired transport which we still hoped would arrive, then work in an east-north-easterly direction, taking with him the remaining twenty-four ponies and their drivers, and reaching our rendezvous on Antelope Plain by easy stages. His route was marked on the map, while mine could be easily followed by means of the plane table and the previously fixed peaks. Khalik was much opposed to this arrangement, doing all he could to dissuade us from going on, and urging that we should at least wait for the grain; had we taken his advice, we should still have been resting by Arport Tso.

On the following morning—June 24th—we parted company amidst much bustle and excitement. Though we were only to be away for a fortnight, the men embraced each other and wept copiously—indeed, had they been going to instant execution they could not have been more deeply affected, and at one time I feared that we should never get away at all, so prostrated with grief were the poor fellows.

[1] Jhool = Indian horse-rug.

My party moved due south into the Aru Tso mountains, and then turned eastwards into a broad grassy valley. The previous year I had here seen many herds of yak, though mainly cows and calves; at this season, however, not one of these beasts was to be seen, though kiang and antelope were plentiful. I shot two of the latter—both carrying handsome horns of 25 inches. We camped on the hillside amidst wild and desolate scenery, finding plenty of grass, water and yak-dung fuel.

To the east of the camp was a pass of great altitude, which we were to cross the next day, and in order to get to the top before the midday thaw set in, it was necessary to rise as soon as it began to get light, and to strike camp and pack our loads with 20 degrees of frost—an unenviable experience. A long pull of eight miles brought us to the summit, which was found to be 18,550 feet above sea-level. We had brought with us two good aneroids, each registering up to 24,000 feet, and up to this time they had worked well; on this pass, however, they behaved in the most erratic manner, jumping to 21,500 feet and 22,000 feet respectively. They partially righted themselves before our arrival in camp at the end of the day, but it was many months before they worked accurately again, and when the theodolite was not available we had to rely upon the hypsometer or boiling-point thermometer for all altitudes.

For two marches we pushed on in a south-easterly direction, crossing a great plain, and passing herds of yaks and antelope on the way. In almost every ravine at least one old bull yak was to be seen grazing on the short grass growing by the streams. Many carried splendid horns, but although I was desirous of obtaining a really good head, it was out of the

question, for at this stage of our journey it would have been madness to have burdened the ponies with massive horns. Their shaggy coal-black bodies stood out distinctly against the light-coloured soil and rendered them conspicuous objects many miles away. As is usually the case when least wanted, many were in positions where an easy stalk was possible. One beauty might have been shot on the second day within a few hundred yards of the camp, for while the men were pitching the tents he was discovered, peacefully dozing away the afternoon, in a ravine close by.

In the afternoon one of our three remaining fowls laid an egg; it was neither oval, round, nor of any known form, nevertheless it *was* an egg, and the arrival was announced by many self-satisfied cluckings. A search disclosed the precious object reposing on my one clean woollen shirt!

On the morning of June 26th we awoke to find about four inches of snow on the ground and a cloud of flakes falling steadily, driven before a northerly gale. Anything was better than staying in our present position, so packing up we made our way in a south-easterly direction; within an hour the snow ceased and the clouds rolled away as if by magic, leaving a brilliantly clear sky.

We were now in a totally unknown country, but from a study of Deasy's map I felt pretty confident that we must be near a lake called Shemen Tso. Turning sharp to the south, we came suddenly upon it. The lake is about 100 square miles in area, the shores very irregular in outline, with rocky ridges projecting from the eastern and western sides for many miles. The water was intensely salt, so the caravan worked along the northern shore in the hope of finding a fresh spring, but it was not until late in the afternoon that

some good pools were discovered. Near the edge of the lake the bed is sandy, and no animal life was to be seen either in or on the water. On the grassy slopes which bound its northern shores, however, it is very different; here kiang and antelope abound, while *goa* or Tibetan gazelle pick their way timidly about the nullahs, and immense herds of yaks graze on the hillsides. It is difficult to believe in the profusion of animal life in this tract of country unless it has actually been seen; some of these herds of yaks, for instance, must have numbered hundreds, while the total to be found in these valleys would run into many thousands.

On closer inspection of our halting-place, it was found to be a mass of ice covered with rich soil. The ice is of very ancient formation, for the grass above grows rich and thick, the roots running through two feet of loam before reaching the frozen water. In many places the ice had partially thawed, leaving basins three to four feet deep, several of which were filled with fresh water, while others were dry and had been used by wolves as lairs and ambuscades whence they could leap on to the unsuspecting antelope coming down to drink; this was evidenced by the number of wolf-bones lying around, and the immense collection of antelope fur and skulls which strewed the ground.

During the night snow fell at intervals, and as the grass was good and rich it was decided to remain here for one day in order to bring the map up to date. Our halt was prolonged for yet another day, but this time the delay was quite unavoidable, for on the following morning none of our own seventeen ponies could be found. A splendid view was obtained of the surrounding country, but no sight of the wandering animals



NEAR SHEMEN TSO.



KIANG PLAIN NEAR SHEMEN TSO.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

rewarded our efforts, and the men were consequently sent out to track them.

As the day wore on the searchers returned one by one, all with the same report—that there was no sign of the ponies anywhere; they might have vanished into thin air for all the trace they left behind. We indulged in many conjectures as to the fate of our animals: they might have been stolen by *chukpas* (brigands); or the wolves, which had been howling round the camp all night, might have driven them away in a general stampede. In the afternoon the situation began to look serious; were the ponies really lost, I should not be able to move another step forward, and Hargreaves would be waiting for me in vain at our rendezvous. I anxiously scanned the horizon with my glasses, but failed to see anything beyond a dark spot that appeared to be moving miles away across the plain.

When the sun had set, the largest possible fire was lighted with our limited stock of fuel, to act as a guide to the three men who were still absent. At nine o'clock a faint shout was heard, and then, to our intense relief, the clatter of the ponies' hoofs, as sixteen of the truants stumbled over the boulders on their way to the tents. Rarely had I heard so welcome a sound!

It appeared that they had been found in a side nullah, about eleven miles from camp, quietly grazing among the rocks, and quite indifferent to the anxiety which their absence was causing to their owners. The man who found them said that the nullah in which they were grazing was a sportsman's paradise—abounding in yaks, antelope, goa, burhel and wolves. The seventeenth pony was also found the next day, hiding amongst some rocks several miles away; he probably thought that he had done enough work and deserved a

rest—if so, his plans were rudely disturbed, for owing to the death of one of the hired ponies each individual load was slightly increased.

We now struck due east towards a likely-looking spot in the rugged range of mountains, finding an excellent pass, which subsequently brought us into a great stony plain. Ram Singh and I, accompanied by the faithful Soonam Sirring, climbed an isolated mountain for the purpose of plane-tabling. The ascent was a trying one, over loose, sharp limestone chips, but from the top a fine view was obtained of the whole of Shemen Tso, lying in glassy stillness below.

In the opposite direction, the men and ponies, mere specks in the distance, could be seen slowly wending their way across a plain teeming with herds of kiang. Many of these animals, curious as to our identity, approached to within fifty yards of the caravan, and then wheeling and tearing madly away, disappeared in clouds of dust. So numerous were these beasts that we christened this flat stretch of country "Kiang Plain." Farther on, a herd of about forty gazelle were met with, slaking their thirst in a tiny stream of fresh water, and though their flight was precipitous, one was induced to stay to provide a meal for the hungry men.

On June 30th an attempt was made to get across the mountains which barred our way to the north-east, but after climbing many hills and clambering down again on the opposite side, we found ourselves very little better off than when we started. I then determined to ascend a lofty hill with the object of seeing how the land lay, and from the summit discovered a passage to the east which promised well. On my return to the camp, I found that a visitor had arrived in the person of a champa or Tibetan nomad. He was about five feet in height, and only half clad in filthy, blood-

stained sheepskin garments; his hair was unkempt and matted with dirt and grease; in his girdle of rope was stuck a ridiculous, rusty old sword. His face wore a sort of half-witted expression, and altogether he presented a most deplorable spectacle. Frequent bowing and cringing showed us that his intentions were pacific.

After imbibing much tea, we found out that he formed one of a party of five—three men and two women; their village was eighteen marches distant, and they had come to this valley to hunt and trap. They obtained their living by this means, drying and selling the flesh of any animals caught to their village people, though up to the present they had had little luck with any beasts except kiang. We presented him with a little tea, sugar and *suttoo*,[1] and so gained the further information that his party possessed eight yaks which they would be willing to lend us for three marches; accordingly, at dusk he left us to collect these animals, one of our men going with him.

At daybreak neither the champa nor our man had returned, so the start was postponed for an hour. The country was again deep in snow, and our troubles were intensified on discovering that the road five miles farther on turned more and more to the south-west; seeing that this track would be of little benefit to us, we changed our course and made direct for a slight dip in the mountains to the north.

On approaching this ascent, a baby antelope crouching in the snow was nearly trodden upon; it had probably been placed there by its mother, so as to escape our notice. Every effort was made to effect a capture by driving it into a corner, but though it could not have been more than a day old, it succeeded in

[1] Suttoo = ground barley.

breaking away and making its escape, easily outstripping the ponies over the rough ground. We watched it for about a mile, until it joined its mother, when they both scurried away out of sight.

On gaining the summit, a vast expanse of treeless, barren mountains stretched before us, while just below was a stream which ran apparently straight into the mountains, and fortunately in the desired direction.

The baggage animals scrambled over the crest with difficulty, and, sliding and slipping over the half-thawed snow, finally reached the rushing water.

The course of the river was followed for five miles. The water gradually became deeper and the passage more difficult; the mountains slowly closed in upon the stream, until our progress became a mere scramble over rocks, with precipitous cliffs on either hand, whilst the icy torrent rushed and foamed through tortuous passages, drenching with its spray the surrounding boulders.

We were hoping every moment to debouch into a plain north of Aru Tso, and therefore drove or pushed the unwilling animals over obstacles which at any other time would most effectually have barred our passage. Our hopes were doomed to disappointment, for we suddenly found ourselves on the brink of a fifteen-foot waterfall, where the stream, forcing its way between precipitous cliffs which rose on either side, rendered any idea of a turning movement out of the question. As we halted above the fall to examine carefully for any possible exit, we found the remains of two ponies, whilst below could be seen the bones of ten others. The skeletons, as far as could be judged, appeared to be about eight years old. The hoofs were shod with iron shoes similar to those used in India, and quite unlike those made by the Tibetans.

A fruitless search was made for straps, buckles, or any other article which might help us to arrive at some conclusion as to where these animals came from, and why they had all died together in this unknown defile. In 1896 Captain Deasy had lost ten animals five marches to the south of this place—a long distance for ponies to wander, and again the numbers did not coincide. I brought back two of the shoes, but no further information was obtained which threw any light on the tragedy.

We were now compelled to retrace our steps for a mile, and as night was coming on, halted in a side nullah. Water was plentiful, but there was not a blade of grass for the ponies nor a boortsa root with which to make a fire. The tired animals were given a little extra grain, while the men had to be content with the remains of some cooked food which they fortunately had with them. The problem of how to get out of this awkward position was a somewhat disturbing one, and the difficulty was increased by our being unable to make out the lie of the country owing to the snow which covered the ground.

The man whom we had left behind in the morning rejoined at midday. It appeared that our champa friend had not intended to play us false, but had taken all the morning to collect his yaks, and found, on arriving at the camp, that we had departed some hours previously. We had, indeed, seen him from the summit of the ridge crossed in the morning, driving his eight yaks towards our last camp.

At daybreak the next day we set out once more, full of hope that the open country would be gained in a few hours, and these hopes seemed likely to be fulfilled when, from the ridge just above the camp, we caught sight of the salt lake which lies to the north

of Aru Tso. A fine stream, with smooth and easy banks, ran straight towards it. So certain were we that we had found a way out, that we there and then determined to make a march of only three or four miles, and then to give the ponies a long afternoon's rest.

Alas! the scene changed rapidly. The going became worse and worse, and after two miles the road was completely blocked, narrowing down to a mere gorge filled with immense boulders, over which the river poured in a foaming torrent.

Our plight now seemed worse than ever, and it appeared absolutely necessary to retrace our steps along the road by which we had come, and then make a detour of many marches. The thought of this was so disagreeable that a halt was called. While thus deliberating, one of the men spied the track of a wild yak high up on the mountain-side, and this it was determined to follow, for where the yak had gone we might possibly succeed—though had we known exactly what was in store for us, I doubt whether we should have risked the ponies' lives.

An hour's tedious climb brought us to a narrow ledge of loose soil along which four wild yaks had recently passed: they had chosen the only possible route for man or beast. The track wandered in and out of nullahs, up and down precipitous cliffs, and over slippery ledges of rock and jagged spurs; some of the places were so steep that snow could not lie.

As we made our way slowly forward, snow fell steadily, accompanied by a bitter wind; but our exertions kept us warm, for every few yards we had to unload the ponies, pull and push them along places, the like of which they had never seen before. Then the loads were replaced and the animals driven on

again for a few dozen yards, only for the process to be repeated, over and over again.

We were, however, favoured by luck; for, incredible as it may seem, three ponies fell from 100 to 200 feet and yet sustained practically no injury; the accidents all occurred at the same place, a shelving snow-clad ridge, the ponies rolling over and over down the slope till their progress was fortunately arrested by a projecting rock. Here they lay kicking, with the breath knocked out of their bodies but with no bones broken. The men clambered down after them, and managed with a little petting and coaxing to get them on their feet again.

The only loads actually lost were fortunately those which could most readily be spared, such as meat, etc., but some of the harder goods were much damaged.

Thanks to the untiring efforts of the drivers, the whole caravan debouched into the plain at 5 p.m., having taken some nine hours to cover a distance of three miles. It was, however, a most welcome spot. All around was an abundance of rich grass, and, to compensate for the loss of our meat, there stood on the camping-ground a fine antelope, waiting to be shot in the most obliging manner; in addition, a brace of chikor and a hare were bagged, so that more was gained than lost in the way of food.

Troubles were soon forgotten around the camp-fires, and at an early hour all turned in to rest, for hardy as the men were, they were exhausted by the fatigues of the day.

CHAPTER VIII

TO ANTELOPE PLAIN

DURING the night snow fell to the depth of four inches, effectually preventing the ponies from grazing, so the camp was moved to the shores of a small fresh-water lake north of Memar Chhaka.[1] Memar Chhaka was found to be intensely bitter and obviously rapidly shrinking in size. The surrounding land for a distance of three or four miles is almost flat and covered with rich grass.

The district we were about to enter differed very considerably from that just left; mighty mountains with precipitous sides gave place to rolling downs, and instead of rushing rivers, slowly-moving streams trickled down the gently sloping valleys; the soil seemed poorer and the vegetation more scanty, but the landscape was just as treeless as ever.

During the next night the ponies again strayed, and the sun was high in the heavens before they were recovered. It appeared useless to hobble them, as they seemed to travel as well on three legs as on four, and in order to prevent a recurrence of this annoying delay, a "grazing guard" was established from this day. Three men were sent out with the ponies every night, taking their bedding with them: on arriving at the grazing-ground, two would turn in to

[1] "Chhaka" is the Tibetan name for any water which is undrinkable, whether from salt, soda or any other cause.

sleep, while the third kept watch over the animals' movements. The sentry was changed every two hours until morning, when the ponies would be driven back to camp. Never again did they give any trouble by straying.

A river of some considerable size ran into the northern end of Memar Chhaka, and this the caravan was obliged to cross. Had an early start been made, we could have crossed on the ice, or, at any rate, we should have found the boggy banks frozen hard, but as it was, a most unpleasant couple of hours was experienced. The temperature of the water was well below freezing-point, and the rush of the stream intensified the cold. The animals had the greatest difficulty in fording the river, and it was only by the combined efforts of four or five men, pulling, pushing and urging on with shouts and blows each floundering pony that they got on at all. Had they been allowed to pause for a moment, they would have sunk into the quicksands past all recovery; indeed, one poor beast had to be bodily hauled over, as he was suffering from a sprained shoulder, the result of a fall down the hillside two days before. All the baggage had to be carried over by hand, each load requiring three men on account of the treacherous nature of the soil. Our lower limbs were numbed with the cold, and much vigorous rubbing was needed before the circulation was re-established.

When the river was crossed and all were once more on the move, we made straight for a nullah lying dead ahead. Some little way up this valley two nomads, man and wife, were found in charge of a herd of sheep. They were both young, of pleasing appearance, and apparently of a superior type to the man met a week before; the woman had a clean face,

and wore her hair artistically plaited round her shoulders. Their garments, however, were matted with dirt and grease, and when we saw their tent, consisting merely of thin rugs kept in position by two sticks, string and stones, we realised with feelings of repulsion how exceedingly filthy are the habits of these nomads. Over the surrounding ground and on the floor of the tent itself were strewn pieces of flesh, bones and the decomposing entrails of slaughtered animals. They were living exclusively on the flesh of wild beasts, large quantities of dried kiang meat being piled up on the floor of the tent.

The weapon with which the game had been slaughtered was produced. It was a rough iron tube, fitted into a still rougher butt of wood; from the muzzle dangled an iron prong, used as a rest when the weapon was fired. This hazardous operation was accomplished by igniting the coarse powder with a slow match. The whole apparatus was smeared with blood and filth.

These people told us that they had been at this spot (called Pallo Letok) for four or five days, awaiting the arrival of some gold-diggers from Lhasa, to whom they appeared to act not only as hunters but also as man and maid of all work.

The old gold-diggings almost cover the whole valley, and well repay the labour expended upon them, as the district is doubtless very rich in this metal. Our new acquaintances declared that these diggings had been made in the previous year, but all attempts to ascertain the amount of gold extracted were fruitless, both the man and the woman being reticent on the point, though on all other subjects they conversed freely. They told us that men were already at work in the neighbouring ravines. As the pony with the

strained shoulder was in considerable pain and would not be fit for work for some time, he was presented to these people, a gift obviously much appreciated.

No halt was made here, and late in the afternoon a good camping-ground was reached on the far side of the range. A fine lake was seen two miles to the east, but mounds of some white mineral, piled up along the banks, almost certainly indicated that the water was undrinkable. Although this was the 5th of July, the lake was frozen from end to end.

The ponies were so much exhausted that they had some little difficulty in reaching the camping-ground, so it was decided to take a day's rest in order to allow them to recover their strength.

On the following morning I made my way to the shores of the lake, and found, as expected, that the water was quite undrinkable; all around rose a solid ridge of salt-deposit, three to four feet high and from thirty to forty feet wide. No vegetation grew within 500 yards of the shores, while to the north a barren plain stretched away for many miles. The lake is about twenty square miles in area, and appears to be quite unknown, not only to geographers, but, if they are to be believed, to the nomads also. We gave it the name of Gore Tso, after the late Surveyor-General of India, Colonel St. G. Gore.

One march to the north of the lake is a mighty mass of rock and snow, a conspicuous landmark visible for some hundred miles in all directions. This had been previously triangulated by Captain Deasy, and as it will be referred to on several subsequent occasions, we named it the "Deasy Group."

On returning to camp a small herd of antelope was seen grazing on the hillside, and as the camp was out

of meat I determined to see if I could not secure one of them for the pot. A successful stalk brought me to within 100 yards of the buck which I had picked out. The animal was lying down, and did not appear to notice me as I peered round a rock, and I decided, therefore, to wait until he moved in order to get a clear shot. He showed no inclination to do this, however, so after a ten minutes' wait, matters were brought to a crisis by my openly showing myself. He jumped up and stood facing me; I quickly drew a bead on his shoulder and was just pulling the trigger, when another buck appeared over the ridge, striding along with stately step. A glance showed that the new-comer possessed a much finer pair of horns than the one I was covering, so the sight was transferred without a moment's loss of time. The sharp crack of the rifle rang out, but the buck remained perfectly indifferent, calmly contemplating the scene; but a moment was spent in reloading, yet in that time I realised what a magnificent animal it was that stood before me. This time no mistake was made, and a bullet behind the shoulder killed him on the spot. On measuring his horns, they were found to be 27¼ inches from tip to base, within half an inch of the record secured many years ago. I carried the head proudly back to camp, and laid it before my door; even the phlegmatic natives were moved to enthusiasm by the sight, for as it lay there the horns seemed to be many inches longer than any previously seen or obtained.

After the day's rest the ponies travelled well. To lighten the loads of the baggage animals, the riding-ponies were given their share of the burdens, and from now onwards we were unable ourselves to ride at all.

A fresh valley was entered, but it was soon found that the farther we advanced the scantier became the vegetation, and so a halt was called in a sheltered ravine where a little grazing was still to be found. The country was swarming with a small marmot-like rat, and to pass away the time we dug up a couple. When held in the hand or placed on the table, they showed not the slightest sign of fear, and even when put on the ground made no attempt to escape. They were placed in a box lined with grass, but although they seemed to feed well, one died in the night, and as the other appeared to mope for his little companion, we turned him loose. He would not run away and was therefore placed in a burrow, where he no doubt soon forgot his short experience of mankind and condensed milk.

A sharp turn to the north brought us to a deserted gold-field, where thousands of pits stretched northwards for two or three miles. The valley was now still and silent, but quite recently it must have been alive with gold-seekers, for the water-runs and dams were quite distinct and sharply defined. The excavations had been only carried to a depth of from six to eight feet.

From this interesting place we descended into a great stony plain, bounded on the west by a steep and rocky range, while to the north the mighty Deasy Group apparently shut us off from the spot appointed as the rendezvous with Hargreaves and the rest of the party. The thin atmosphere and the immense extent of the landscape made it very difficult to estimate the distance, and it was not till the second day that we reached the lower slopes of the range. Our course was directed towards the most likely-looking valley, which lay slightly to the east of the point where the snow-field apparently ended.

After much climbing, a turn in the path disclosed the unwelcome fact that we were once more in a veritable trap, for the desolate snow-field blocked all advance to the north, stretching away on either hand for miles, whilst a mighty glacier completely closed the head of the valley.

During the last few hours of the march the ponies had been straggling badly, several showing signs of giving in altogether. As it was evident that three or four of them could go but little further, we halted by the stream which flowed from the glacier's mouth. This was a risky proceeding for not a blade of grass was visible, but there was nothing else to be done. The last bag of precious chopped straw was reluctantly opened and given to the animals. The grain had come to an end some days previously, but the straw enabled each beast to partially fill his empty stomach, and it was hoped that this, combined with some hours' rest, would render them capable of a further onward movement. The outlook was, however, gloomy: no grass, no fuel and no meat, the animals weak and tired, and no visible means of getting out of our critical position.

After tea, that "king of drinks" to a tired man, the freshest members of the party climbed the spurs which lay to the east, in the hope of finding some means of escape from our precarious position. Another plain was then discovered, from the northern part of which many ravines apparently cut their way through the Deasy Group. On returning to camp, we came unanimously to the conclusion that one of the ravines might lead through the mountains to Antelope Plain, which place it was necessary for us to reach in one march, as the majority of the animals would succumb if they went for another twenty-four hours without good food.

It was with anxious hearts that we started on our way the next day. Exploring is never an unmixed pleasure, and were all days to be like the one upon which we were entering but little would be done. Ram Singh and I started ahead of the caravan. The road crossed the spur, and for the first three miles ran along the edge of the plain, into which numerous spurs descended from the north. The valleys were searched in vain for a possible outlet; all were blocked by the same apparently interminable snow-field.

The thought of the desperate plight of our animals, however, incited us to fresh efforts, and after climbing another rugged spur a ravine was found which seemed to promise well, though boulders, half-frozen slopes of snow, and treacherous slides made it anything but an ideal track. Nevertheless, our only means of escape lay apparently in this direction, and we felt that nothing should stop us now. Our spirits rose with a bound—there would be just one sharp struggle, a rest on the top, and then an easy drop into Antelope Plain, probably right into Hargreaves' camp, there to find plenty of food, grass and shelter. The nearer we got to the top, the faster we scrambled, and the more the animals were urged forward by the willing, eager men —one more effort and our troubles would be at an end.

All our hopes were soon dashed to the ground, as a sea of mountains stretched to the front, completely blocking any direct forward movement. This seemed inexplicable, for our mapping could not be very far wrong, and the goal was certainly not ten miles distant. Lamentations were useless: there were the mountains, and some exit had to be found. We decided to climb some height from which an uninterrupted view of the surrounding country could be obtained, and, for this purpose, fixed on a hill which lay to the east. It was

steep, certainly, but a slope of snow in perfect condition for climbing helped us on our way, and an hour's steady work brought us to the top. We stood upon a pinnacle nearly 20,000 feet above sea-level, without a cloud in the sky or a mountain to impede our view in all directions. This, however, was no time for revelling in panoramic displays, and, after searching the surrounding country with our glasses, a low-lying pass was discovered about two miles distant, which, though rough and covered with drift snow, led into a river-bed and opened out into Antelope Plain, glimpses of which could be obtained in the distance. Soonam Sirring, who had accompanied us and had been carrying the plane table, was sent back with minute directions to the caravan as to the course which was to be followed, whilst we turned our attention to the glorious panorama which lay before our eyes. To the north, distant about fifty miles, were the mighty Kuan Luan Mountains, an endless wall of glittering snow and ice, stretching to the east and west as far as the eye could reach; to the east and north-east lay a great plain, broken by small ranges, knolls, and deep blue lakes; to the south, rose range beyond range of bold, snow-capped peaks, with flat and apparently barren plains between; to the west and close at hand was the snow-field, almost blinding in its whiteness.

It was a marvellous and most impressive sight, and rendered all the more beautiful by the cloudless sky and the wonderfully clear atmosphere. Far away to the north-east, about 200 miles distant, one peak of the Kuan Luan range could be distinguished, perfectly regular in outline and o'ertopping the rest by many hundreds of feet, an immense cone of snow; we were unfortunately unable to fix this peak, and were never in a position to see it again.

Our observations were necessarily brief, as time was pressing and we had to push on. A toboggan down the snow-slope, with the *khud* sticks between our legs, soon brought us to the bottom; it was an invigorating and delightful descent, if somewhat hurried.

The caravan was overtaken in the pass, and the ponies found struggling through deep, soft snow, which concealed boggy ground and sharp boulders. After two hours of fatiguing travelling over ground of this nature, the main river-bed was entered, along which the ponies were urged, as the complete absence of grass prevented us from indulging in any brief halts.

The weary animals now formed a long, straggling line, one man to every two; and in this manner the poor beasts were urged on mile after mile.

At dusk we entered Antelope Plain, and still there was no grass. For an hour more, and as long as any light remained, the search was continued, until at length our efforts were partially rewarded by the discovery of a patch of withered grass, a little fuel, and a running stream.

We were all dead tired, but not a moment was lost; the loads were taken off and the tents erected. The really excellent qualities of our men were now displayed, for though they had been thirteen hours on the road, tramping over deep and rocky ground, climbing ridges, replacing fallen loads, driving and assisting weary ponies, yet on arrival in camp they were as cheerful as could be; not a grumble was heard, though there was ample cause for it, as they had practically no fire or food, and three of them had to pick up their blankets at once and spend the night with the ponies.

Soonam Tilney, with the two weakest ponies, was still on the road. Every effort was made to

guide him to camp by shouting and firing shots, but without success; this plucky man did not turn up until the following day, refusing to leave his charges, and spending the night on the road without food or rugs. One of the ponies was too weak to extricate himself from a snowdrift into which he had fallen, and the other also died soon after arrival.

Though we hardly expected to find Hargreaves at that time of the night, a sharp look-out was kept for his camp-fires, but without success.

CHAPTER IX

TREASURE TROVE

NOTHING was to be seen of Hargreaves or his camp on the following morning, so all the men, with the exception of the cook, were despatched on scouting duty.

At about eleven o'clock two men and a pony were seen in the far distance, slowly approaching the camp; one of our scouts met them, and, with the aid of our glasses, we saw them shake hands; an hour later the party arrived in camp. They proved to be Umar Sheik and Num Gel, with Hargreaves' riding-pony.

Their first proceeding was to throw themselves on the ground and burst into tears, a somewhat disconcerting manœuvre; no information could be dragged from them for some minutes, but at last, after much fumbling in their inner pockets, they produced a letter in Hargreaves' familiar handwriting. This was a relief, for I was beginning to fear that something serious had happened to my friend, but the news the letter contained was bad enough.

Two days after we had parted company at Arport Tso, he had been overtaken by a blizzard which lasted more or less for four days; eighteen of our own twenty-four ponies and two of the four hired ones had succumbed to starvation and cold; no stores of grain arrived, for the yak-drivers, throwing everything away, including all the rice and most of the flour, had deserted *en masse*. Realising that my detached party

would have no food supplies left, Hargreaves loaded up the remaining eight ponies and made every effort to reach me. Short marches only could be accomplished, and after reaching camp the ponies were sent back to bring up further supplies. This work proved so heavy, that two more ponies died by the wayside, leaving six enfeebled animals only with which to make a supreme effort. Sixty miles short of the prearranged meeting-place the poor beasts finally broke down, and a halt had to be called. Two of the men with the two strongest ponies (one of which died on the road) were then sent forward by Hargreaves, in the hope of finding and bringing us back, as his party was incapable of further movement forwards or backwards.

This was indeed a knock-down blow! All ideas of proceeding eastwards for two or three hundred miles had to be abandoned at once, for, at all costs, Hargreaves had to be rejoined; this accomplished, we should have to strike southwards in the hope of meeting Tibetans from whom help might be obtained. It was a bitter disappointment, but there was no alternative before us.

As we understood that Hargreaves and his party had a sufficient supply of stores for their present needs, I determined to leave them where they were for the time being and explore in an easterly direction—a risky proceeding, no doubt, but one that appealed strongly to me, as we had reached the most easterly point which Deasy had previously surveyed. Orders were consequently given that the ponies should be got ready for two forced marches to the east, and I made up my mind that in those two days we would map all the neighbouring district.

But even this amount of satisfaction was denied me, for the men came in a body to my tent and



HARGREAVES' CAMP AT ARPORT TSO; DEAD PONIES IN THE FOREGROUND.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

begged that I would not proceed in that direction, as they said, perhaps with justice, that the risks would be too great; they pointed out that only one day's rations remained and that we had no meat at all. This plan of mine had, therefore, to be reluctantly abandoned.

The faithful Ram Singh came to my assistance at this point; he and Soonam Sirring had both been with Captain Deasy when he crossed the Kuan Luan range from Chinese Turkestan into Tibet in 1900; it had been intended to traverse Tibet, finishing the expedition in Burma, but sickness had attacked the men when they reached Yeshil Kul, and the expedition consequently returned to Leh. Before they left Yeshil Kul, however, Deasy had buried many maunds of stores and supplies in a hiding-place marked by cairns of stones. Now Hargreaves was encamped on the banks of Yeshil Kul, and both Ram Singh and Soonam Sirring knew the whereabouts of this hidden supply—if we could only find it, the grain could be used to strengthen the starving ponies, and we could set out afresh with renewed energy. We determined, therefore, to leave the tents and everything which we could possibly do without for the present, and return to Hargreaves with all the available ponies.

This would be no easy task, on account of the shortness of rations; the men had only enough flour for one day, and my own foodstuffs were reduced to tea, potatoes and tobacco. A halt here, however, would have been worse than useless, so on July 12th we piled up all the surplus goods inside one of the tents (all three of which were left standing), and set out for Yeshil Kul.

On the first day we covered sixteen miles, and on the second twenty; almost more than we could do, for walking at an altitude of 17,000 feet takes more out of

one than any exercise I know of. To make matters worse, no fresh water could be found and the supply of rations gave out. Meat had to be obtained somehow, but fortunately a long search was unnecessary, for late in the afternoon, during a temporary halt, the tell-tale horns of an antelope were seen projecting above a tuft of grass not 200 yards away.

Shooting for sport is a very different matter from shooting for food, when eager and hungry men are dependent on the accuracy of the shot, and in such circumstances the stalk becomes almost a painful affair. Not a word was spoken; I drew nearer and nearer, and when about eighty yards distant the antelope slowly got upon his legs and stretched himself, as if waiting for the shot; with a slow and careful aim I fired, and the beast dropped. Scarcely had the report of the rifle died away before a second antelope rose from a hollow just beyond, and suffered the same fate. Both were stone dead, but the ceremony of *hall-alling* (throat-cutting) was performed nevertheless, the Mahomedans squeezing a few drops of blood from the wound.

Near Yeshil Kul a halt was made, but the absence of fresh water compelled us to dig in the dry ravine—a measure which met with some success, for we came upon a trickle of water four feet below the surface, enough to satisfy our immediate wants.

We were unable, however, to locate the buried treasure, although both Ram Singh and Soonam Sirring declared it must be close at hand. The animals were unloaded at four o'clock in the afternoon, but Soonam Sirring volunteered to continue the search, and started off alone, taking my glasses with him. Night came on, and no sign of his return; no one turned in, for all were anxiously awaiting the result of the search; at eleven o'clock he suddenly

appeared in our midst, carrying on his back a bag which contained flour unearthed from the buried store. He had found the spot, uncovered a few things, and brought back some of the flour to show that it was still in good condition.

All were naturally much elated at this news; but Soonam, who had travelled thirty-four miles in the day without food, completely collapsed from fatigue.

Early the next morning we quickly covered the seven miles separating us from the depôt, which was situated in the centre of a small knoll, about three feet below the surface. The whole party promptly set to work to remove the upper layer of earth, which had become as hard as the surrounding ground since it had been replaced three years before; some dug with sharp stones, while others pulled at the loosened soil with their hands. First we came upon a rotten, wet tarpaulin; underneath this three yakdans and many bulging waterproof bags were disclosed, and below these again other bags made of native cloth, and filled with Indian corn. The canvas itself had rotted, but the water, which had penetrated the sides of the knoll, had soaked through the grain for a depth of two or three inches, causing the corn to swell up in such a manner as to form an impenetrable cake, all the central portion of the grain remaining in a good state of preservation.

Our first thought was to relieve the famished ponies. Each was given a bowl full of grain gathered from the cleanest and freshest-looking sacks; but, to our dismay, not one of the Ladaki ponies would touch it, although they must have been suffering considerably from the pangs of hunger—the Yarkandi animals, on the other hand, devoted themselves to the repast with evident signs of pleasure.

Meanwhile two of the waterproof bags, when taken out and opened, were found to contain flour and rice in excellent condition. The flour was mixed with water and made into a paste, of which all partook, for we had had nothing but meat for forty-eight hours.

Our thoughts now turned to Hargreaves, who was supposed to be encamped about ten miles away, on the southern shore of Yeshil Kul. Six of the strongest ponies were saddled and sent, with three men, to his relief. As soon as this party had gone, we further examined our treasure trove, and quickly discovered other precious stores. What we valued perhaps more than anything else were two boxes of horse and pony shoes and a plentiful supply of nails; they were much rusted, certainly, but were worth to us more than their weight in gold. Closely packed between the sacks were sealed cases of ·303 cartridges, of which a goodly number were appropriated.

The yakdans were streaming wet and padlocked, but the staples, eaten through with rust, gave way at the least pressure. The contents, though mouldy and wet, proved to be a carefully packed collection of those various odds and ends which add so much to the comfort of the traveller.

CHAPTER X

REJOINING HARGREAVES

Relieved in mind and refreshed in body, we turned in early to rest that evening. The night was still and cold, but as we had been steadily descending since leaving Antelope Plain, it was found not at all unpleasant to sleep without tents in the open air.

About three o'clock in the afternoon of the next day — July 14th — Hargreaves' caravan was seen approaching. In front walked Hargreaves himself, leading his pony; following him were ten ponies, slowly dragging themselves along; only the six animals which we had despatched the day before were carrying loads; the others—the sole survivors of those left at Arport Tso—were too weak to support anything but their saddles. Indeed, they were so emaciated and feeble that only with the greatest difficulty could they reach our camp.

All was now bustle and excitement. Everybody began to talk at once, each asking questions of the other and no one waiting for an answer; presently the pleased and happy men divided into little groups, each hobnobbing with his particular chum.

Hargreaves looked worn and considerably thinner than when we had parted at Arport Tso, which was scarcely to be wondered at considering all the worries he had gone through. I cannot do better than give his story in his own words.

"On the day you left me," he said, "I stayed in camp, waiting for the arrival of the yaks with the grain. The day was fine, but nevertheless two ponies died in the evening. The following day I spent in shooting in the hills, and was much disgusted to find, on my return to camp, that there was still no sign of the expected grain. Next morning I sent back two mounted men to see if they could discover any trace of the missing men and animals; heavy banks of cloud rolled up during the day and hung overhead, whilst a strong wind sprang up, gradually increasing to a gale. Our spirits were further depressed by the death of another pony. When I awoke on the 26th inst., two inches of snow lay on the ground, and round my tent it had drifted into a regular bank; two more ponies staggered to the tent and died.

"It was a most dismal scene; around were the dead bodies of the ponies, swarms of black ravens feasting off their carcases, while the surviving animals stood with downcast heads, shivering near the tent. Two more days went by, and still there were no signs of the grain, atta or rice, and, as the snow continued to fall, the difficulty of advancing or retiring visibly increased. The men, however, kept cheerful, all but a Kashmiri and a Yarkandi who had been sick for some time; so I gave these two a couple of ponies and a supply of food, and sent them back to Ladak.[1]

The snow continued to fall more heavily than ever, until it lay three feet deep, and being unable to stand this condition of affairs any longer, I started on the road to Antelope Plain: we took as much baggage as we could carry, and on the following day sent the animals back for fresh loads.

[1] Both ponies died on the road, but the men got safely back to their homes.

We travelled thus for two marches. When nearing the end of the second march I happened to look back, and saw the ravens hopping round and following two of the straggling ponies; this was an ominous sign that the poor beasts were near their end, and both died on arrival in camp. After that, we abandoned most of the baggage, and, with the last five ponies, attempted to reach the appointed rendezvous, but the extreme weakness of the animals compelled us to call a halt at Yeshil Kul. Here we stayed while two of the men were despatched to find you and bring you back to our aid.

"I myself became very sick, and was only too content to remain quiet. The two men who had been sent back to gain some tidings of the long-expected grain now rejoined us; they reported that all the yak-drivers had deserted, together with their animals, after having stolen the flour and rice and thrown away the grain.

"I had now a pleasant prospect before me—no animals and no reserve supplies; I had, moreover, grave doubts as to whether the men whom I had sent on would succeed in finding you. One of my men knew of Deasy's stores and said he could find them, but he was hopelessly at fault when we came near the supposed position. The days passed slowly by, and whilst waiting in suspense we occupied ourselves by setting traps in order to obtain supplies of food. The weather improved, and the days became warm and cloudless, but you may imagine my delight when, late in the evening of the 14th, I saw your ponies approaching, heard that you had found and were digging up the buried stores, and that only two of your ponies had died."

The spot chosen for our camping-ground was situated on a small, flat piece of land, close to the

river, and here we were destined to stay for eight days. The numerous surrounding nullahs supplied us with an abundance of grass, but the water of the stream, though just drinkable, was most disagreeable. When used for tea, indeed, it was simply disgusting, and induced most unpleasant results, for on the third day everyone was seized with severe abdominal pains. A well was sunk close at hand, and, as this gave us a supply of good water, the sickness soon ceased. After giving the ponies a day's rest, we decided to split up the party once more, and arranged that Ram Singh and Soonam Sirring, together with two caravan-men and five ponies, should set out to map the southern slopes of the Kuan Luan range, which lay directly to the north, and up to the present time had never been topographically surveyed; they were to cover as much ground as possible, and rejoin the standing camp on Antelope Plain on the twelfth day.

Sabhana, the shikari, with four men and ten ponies, was instructed to travel back to the stores which Hargreaves had abandoned; they were to bring on everything that was absolutely necessary, and bury the rest. These two parties were despatched simultaneously in almost directly opposite directions.

The men left with Hargreaves and myself were few in number, and there was plenty of work to keep them all fully employed. Our first care was to attend to the remaining ten miserable ponies, which were all too weak to bear even the lightest burden.

The wounds caused by the loads pressing upon their almost fleshless ribs had to be attended to at once. It was found that the best method of treatment was to sprinkle them with iodoform, then cover with lanoline or hazeline, finishing off with a lint bandage. The sores were dressed twice a day, and

though some of the cases seemed almost hopeless, the hardy constitutions of these little Ladaki ponies finally enabled all to recover.

During our enforced halt in this place our prospects of advancing into the unknown parts of Tibet improved daily; for one thing, the bitter wind, to which we had been subjected since leaving Phobrang, now practically ceased, occasional storms only reminding us of our old enemy. In the second place, the grass, upon the presence of which so much depended, sprang up like magic; while, most important of all, the ponies improved almost hourly in condition, thanks to the care which was taken in the dressing of their wounds, to the rich grass which surrounded them, and to the cessation of all work. Their recovery would have been still more rapid had they all taken kindly to the Indian corn; but one half of the Ladaki animals, though coaxed and tempted by every means, would at no time touch a grain. We tried mixing barley, flour and chopped straw with the corn; but it was of no use, for so long as a single grain of Indian corn remained in the nosebags, they would eat nothing.

Fortunately, since antelope were rather scarce in the neighbouring plains, we had but few mouths to fill, and one animal per day was amply sufficient for all our wants.

The time passed quickly, as we were busily engaged in repacking and sorting stores, attending to the sick ponies, mending clothes and saddles, and doing the hundred and one odd jobs that always demand attention when in camp.

On July 21st Sabhana and his party returned in safety, having fully carried out our orders; they had sorted all the goods at the deserted camp, and buried

everything that could be dispensed with, including six maunds of flour, rugs, traps and saddles. The exact spot is Camp 27A. A solitary cairn, five feet high, was erected in a dip of the ground, and the stores buried six paces to the east and two feet below the surface. Should any other traveller enter that inhospitable district, it is to be hoped that these abandoned stores may prove of value to him.

To our great relief, Sabhana's ponies had actually put on flesh, owing to the fact that they were carrying light loads and had had a plentiful supply of good grass.

The additional flour, rice and tinned goods so added to our impedimenta that it was found necessary to again overhaul the stores and discard everything that was not absolutely essential. Then the original hole in which the goods had lain was cleared out, relined with waterproof bags and repacked. We buried in this place seven yakdans, the majority filled with tinned foods, including 40 lb. of sugar, tea, jams, brawn, dried fish, candles, butter, cornflour, brandy, methylated spirit, matches, rope, etc. Besides this, 720 lb. of flour, a new shooting tent and several rugs were stowed away. Everything was packed closely together, surrounded and covered over with sacks and waterproof sheeting. Rocks were piled up, and finally the whole camp set to work and shovelled on quantities of earth, which was rammed down and smoothed over.

It was like parting with old friends to leave these stores, and the filling-in process was rather like a burial ceremony.

This depôt is situated at Camp 26, where a ravine running from the south-west joins the main nullah running west. North-east of the spot—about 600

yards away—is a hill 250 feet high, on which is a cairn of stones; and south-west of the depôt, on a low ridge about 100 yards away, stands yet another cairn. Immediately between these two is a knoll—30 yards by 20—in the centre of which the treasure lies buried.

CHAPTER XI

IN UNKNOWN COUNTRY

In spite of the great reduction in our stores, considerable difficulty was experienced in getting off on July 23rd, and then, with the animals overburdened and every man carrying a small load, we could do no more than an eight mile march. Grass was fortunately plentiful, but water could only be obtained by digging, and even then it was of very indifferent quality. The weather remained fine, the sky being covered with great masses of cumulus cloud.

Our next march took us to Pul Tso, the waters of which were reported to be drinkable; we found, however, that they contained so great a quantity of soda and salt that the human stomach could not retain the liquid for more than a few minutes, though the ponies were not in the least affected and drank freely.

On the following day, after a long, tiring march across a hot and stony plain, we arrived at a beautiful and very welcome fresh-water stream, and pitched our camp on the banks.

With the aid of glasses, we could distinguish the tents which had been left standing a fortnight previously, and though many miles away, could see that the doors were still closed, and presumed, therefore, that no wandering nomads had so far discovered their whereabouts.

The next day a magnificent view was obtained of the Deasy Group under storm conditions. Masses of thunderclouds continually rolled up from the west, hanging like a pall over the main heights, whilst flashes of lightning followed one another in rapid succession, rending momentarily the clouds into fragments which immediately afterwards sullenly united to obscure the heights from our view. During the short intervals when the pall was shattered, glimpses were obtained of hills clad with fresh-fallen snow.

We found the tents in exactly the same condition in which we had left them, but some of the surveying instruments had disappeared; it was evident, therefore, that Ram Singh had returned, but, for some reason or other, had left again. We could not then find out his exact position, but late in the afternoon the flash of a heliograph revealed him about four miles to the north.

As this camp was an unsuitable spot for a halt, owing to the scarcity of grass, we determined to make another march eastwards and see what fortune had in store for us. The loads, which had slightly diminished during the last four days, were again increased, and difficulty was once more experienced in getting on; accordingly more goods had to be abandoned—such as a tent, camp-bedstead, yakdans and the like—then with every pony laden to the utmost, and every man carrying some small articles on his back, we made our final start eastwards.

On the road numbers of antelope with their young were passed, all trekking west as fast as they could move, only stopping every mile or two for a moment, when some particularly tempting patch of grass awakened their hunger.

The caravan advanced but seven miles, for it was obviously most unwise to test the ponies too much in

their enfeebled condition. We had now reached the very spot from which, seven years before, Captain Deasy had sent forward two natives to find out the nature of the country to the east; they had returned with the report that it was barren and without water. We felt confident, however, that such was not the case, since, as far as the eye could reach, the landscape presented features exactly similar to that in which we were encamped, and the continuous stream of antelope appearing from the east almost certainly indicated that grass flourished in that direction during the greater part of the year.

For the first night, at any rate, our expectations were justified; we came upon a small nullah rich in grass and boortsa, and obtained a sufficient supply of water for ourselves and the ponies by digging six feet below the surface.

Before the tents had been got ready that evening, Ram Singh rejoined us, with all the members of his party well and the ponies quite fit; as he had had the six best animals, it was a relief to find them all alive and in such excellent condition. He had managed to get through some good work on his journey, having covered a large tract of country along the foot of the Kuan Luans, and having incidentally discovered a fresh-water lake, where large numbers of wildfowl, geese, ducks and cranes were breeding. He would have accomplished even more than this, had the country been more fertile, but very little grass was to be found, and, as one of the ponies would not touch the Indian corn, he had been compelled to rejoin us in order to save it from starvation.

During the next afternoon a gale sprang up from the east and nearly carried the camp bodily away; for we had pitched the tents in anticipation of a westerly wind.



HALT BY THE WAY.



A COUNTRY GENTLEMAN SALUTING WITH HIS TONGUE.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

Hargreaves was again attacked by fever during the night, but thanks to heavy doses of quinine, was better by the following afternoon. Having nothing particular to do, I climbed a small ridge to the north of the camp and came upon a truly marvellous sight.

Almost from my feet away to the north and east, as far as the eye could reach, were thousands upon thousands of doe antelope with their young. The mothers were mostly feeding, while the young ones were either lying down and resting, or being urged on by their mothers. All had their heads turned towards the west, and were travelling slowly in that direction, presumably in search of the fresh young grass springing up in the higher western tablelands.

Everyone in camp turned out to see this beautiful sight, and tried, with varying results, to estimate the number of animals in view. This was found very difficult however, more particularly as we could see in the extreme distance a continuous stream of fresh herds steadily approaching; there could not have been less than 15,000 or 20,000 visible at one time. In all probability it was the sight of vast herds like these that induced Captain Deasy to give Antelope Plain its name, as he reports having seen them when first he pitched his camp there.

Snow fell at intervals during the day and the following night. We seized the opportunity of a slight lull to load up the ponies and make a march of six miles in fair comfort, then a terrific hurricane swept over the country, compelling a temporary halt as no headway could be made against the wind. The storm, however, cleared the air, and the journey was continued till dusk, when the camp was pitched beside a small fresh-water lake, about a mile in circumference.

This lake lay in the middle of an immense rolling

plain, covered with boortsa and patches of grass; far away to the north were the Kuan Luans, while to the south rose other rugged ranges; in an easterly direction the country appeared undulating and barren.

Antelope were scattered about the plain, and on the road Hargreaves shot a fine specimen; but, greatly to the distress of the Mahomedans, the animal was shot dead and could not be *hal-lalled* in the orthodox manner—they had no reasonable excuse, this time, for not enforcing their scruples. A leash of hares was also bagged, but found to be as tasteless as ever; and a young leveret, so terrified as to be quite incapable of flight, was made prisoner. The little thing quickly became tame, finally losing all fear of man, and we were hopeful of bringing her safely back to India. Later on, however, she came to an untimely end by self-strangulation. Tibetan sand-grouse were now seen for the first time, but unfortunately too high for a shot: we longed for a brace or two of these birds, for though antelope-flesh is doubtless excellent, it begins to pall upon one in time.

We had now reached entirely unknown country, and were anxious to begin triangulation, utilising, as a base, a ridge which ran due east and west. The ever-recurring water difficulty continually impeded our work, and though holes were sunk at all the more likely spots, only a muddy trickle could be obtained—this we treated with powdered alum, and so managed to collect just sufficient for our immediate wants. Four days were spent at this place (Camp 40), and on July 31st the base was measured both by the chain and the subtense bar—a work necessitating great accuracy, and therefore thrice repeated. Observations for latitude could only be taken by the sun, as

the nights were too cloudy to permit of the stars being seen.

During the second day's halt, Abdul Khalik complained of rheumatism in the legs and back, so he was given a wineglassful of whisky to rub in. Late in the evening he sent over to ask for more, saying that he had put the first dose in a cup and placed it in his tent ready for use, but that one of the caravan-drivers, mistaking it for tea, had drunk it all off without knowing it. This story seemed to us rather "thin," and the makers would, I am afraid, be hardly gratified to learn that their excellent whisky had been mistaken for weak tea, even by a Yarkandi, who, presumably, was somewhat lacking in delicacy of taste. Khalik, at any rate, had to go to bed with his rheumatism, for he got no more alcohol; whisky was far too precious an article to be drunk like weak tea, or indeed to be poured on the back of a caravan-bashi.

While at work triangulating the next day, a covey of sand-grouse settled near, one of which Hargreaves managed to shoot; it was a beautiful bird, gamey-looking and fat, and proved excellent eating. These birds are remarkable for the great length and power of their wings, probably so developed in order to enable them to make headway against the severe Chang winds.

On August 3rd we tried to do some mapping work from the peak which rose a mile to the south, but, after a long and arduous climb, the mountain-tops were found to be enveloped in clouds, thus effectually preventing us from carrying out our intentions; we waited for some time in the hope that the weather would clear, with the result that we were caught in a blizzard and drenched to the skin before the welcome shelter of camp could be regained.

Although hindered by the clouds, the view from the summit of the mountain was very fine. The large lake, first seen on July 9th, was visible, and, on closer inspection, proved to be even larger than at first supposed; to the east the country seemed to consist of rolling downs and valleys covered with rich grass; southwards, about thirty miles away, was a range of rugged hills, through the centre of which ran an ideal pass, level with the plain and about one mile wide. Beyond this range we could see nothing, and therefore concluded that there was a diminution in the height of the country in that direction.

On returning to camp, the Kashmiris came with a complaint that the drivers were consuming more than their fair share of rice and flour; we, accordingly, had a redistribution of stores that afternoon, much to the disgust of not only the Argoons, but also of Abdul Khalik. While the work was in progress, the brilliant idea was conceived of overhauling once again the kits and baggage of the men.

These had all been carefully examined only a week before, and we had flattered ourselves that the fact had been sufficiently impressed on the men's minds that the loads must be reduced to an absolute minimum, out of consideration for the weak condition of the ponies. Our feelings, then, may be better imagined than described on seeing, as the men sullenly and reluctantly undid their kits, a motley collection of rubbish—old shoes, bottles galore, empty tins, skins, sacks, ropes, and, worse than all, numerous mysterious rolls of something which looked like canvas, and which proved to be the very tent sacrificed with such reluctance and so much heroism a week before, cut up and distributed in these weird-looking parcels. With just indignation, then and there the whole collec-

tion was placed in a heap and burned to ashes—a proceeding witnessed with grief and rage by the men. It was very amusing, however, to see the officious zeal with which one rascal would drag to light another's illicit store, while endeavouring to conceal his own by some wonderful sleight of hand. Our poor animals were thus relieved of some 2½ maunds of useless rubbish.

On the next day the weather again changed, snow giving place to rain, whilst the wind came in icy blasts from all directions; rain, however, has this advantage over snow, that it does not deprive the ponies of their food by covering up the grass. As the weather showed no signs of improvement, the tents were shifted to a more sheltered valley five miles farther on.

From here fresh attempts were made to ascend the peaks and to complete the work, and in these we partially succeeded, but only by labouring under most trying conditions: the angles were taken "in thunder, lightning, and in rain"; so intense was the cold that it was with the utmost difficulty that we could work the theodolite or write with our stiffened fingers. It was obvious that one of the worst districts had been chosen in which to commence triangulation, for during a four days' sojourn at this place no less than seven violent snow and hail storms visited us. The range of mountains which lay to the west was responsible for the bad weather, for great masses of nimbus cloud perpetually hid the summits, while the sky in every other direction was perfectly clear.

Hargreaves shot the only antelope seen, for we were now out of the line taken by the migrating does and young. During the expedition fortune was decidedly with us in this respect, for, except on two occasions, not a day passed without our having fresh

meat in camp from the time we left Phobrang (June 4th) to September 4th.

After four days, we set forth from this cheerless neighbourhood at 3 p.m., and as the search for water proved unavailing, night fell and found us still on the march; travelling in the dark, however, is a useless and tiring proceeding, and a halt was accordingly called on reaching a spot where there was plenty of grass. It was an unpleasant evening—one of the "black days" which must come on occasions to the traveller as to everyone else. We dug for water in vain; the leather water-bags which Khalik had been expressly ordered to fill were found to be empty; there was enough water in my bottle for one cup of tea, but none with which to cook the dinner or next morning's breakfast—the men (who had emptied their bottles on the march) and the ponies were still worse off, for they had not a drop.

Moreover, two of the party were missing. Hargreaves, on the road, had found a yak which, on getting wind of the caravan, had moved away at a slow trot; Hargreaves followed, hoping to come upon the beast in some ravine farther on, but the animal kept steadily on, drawing Hargreaves farther and farther away until he realised that pursuit was useless. He then tried to retrace his steps and pick up the tracks of the ponies, but found great difficulty in so doing. Shots were fired at regular intervals from the camp and a large fire lit to guide him, and had it not been for these precautions, he would, in all probability, have had to spend the night in the open.

The other member of the party was not so fortunate; he was a man from Lhasa, a pony-driver, who had been sent in the morning a mile to the north to work the heliograph. The fires were kept burning

all night without any result, and there were no signs of him in the morning. Not much anxiety was felt on his behalf, as he knew the general direction in which the caravan was going, and was aware that we intended to camp on the following day on the shores of the large lake previously seen. Before starting that day, the precaution was taken of agreeing upon and making everyone clearly understand the exact position of the next camp; then we divided—the ponies taking the lowest and easiest route, Hargreaves moving south, while I went along the ridge. All subsequently met on the banks of a large fresh-water stream about two miles from the lake into which it flowed. The missing man was still absent, and not a sign of him could be found; accordingly, after the men had had some food, a search-party was organised, which left camp about 4 p.m., each man carrying two days' rations with him. It had been gone less than an hour, when our gay friend, who had been causing all the trouble, appeared on the plain to the north, walking into camp in a jaunty and somewhat irritating way, as if he had been for a stroll to stretch his legs.

His story was to the effect that, after completing his helio work on the previous day, he thought he could join the caravan by making a short cut; as a result, he had lost his way and had spent a miserable night on the hillside, without fire, food or blankets. This was a lesson to all to avoid short cuts, as Tibet is not a country where the benefits and blessings of fresh air in the open at night can be fully appreciated.

CHAPTER XII

VARIOUS ADVENTURES

THE lake towards which we had been advancing for so long now lay stretched before us; so far as we knew, this was the first time it had been seen by white men. We named it Lake Markham, after the late President of the Royal Geographical Society. It presents an area of about seventy square miles, being seventeen long and four wide. The shores, covered with grass and boortsa, slope steadily upwards, whilst a band of gravel twenty yards wide encircles the lake. At the western end the water is quite fresh, half way along it is drinkable, while at the eastern end it is fit for neither man nor beast. A river of considerable size, debouching from a narrow gorge and breaking into many channels, pours into the western end.

On the following day we made our camp beside a little stream, and enjoyed a most delightful rest from our labours. Hardly a breath of wind was stirring as we strolled along the southern shore of the lake, basking in the sunshine and our hearts cheered by the music of innumerable larks. Brahmini ducks and hares were plentiful, but experience had already taught us that both were quite useless for the pot.

Our next march brought us to the eastern end of the lake, where a rocky promontory juts out from the southern shore and extends almost across the water, enabling one to obtain a fine view of the entire

lake. Brahmini ducks were seen in large numbers, dotting all the bays round the peninsula, but too wild to allow of any shooting except with a rifle.

On August 9th the caravan made for a valley which lay due east, while Sabhana and I, with the two strongest ponies, made a roundabout tour of nearly thirty miles in a north-easterly direction. We marched along the eastern shore, following a dry watercourse which lay about ten feet above the present level of the lake. There was abundant evidence that Lake Markham overflows its banks at certain seasons, the surplus water escaping by this channel, there to sink into the porous soil or evaporate.

No fresh water was found to the north, but a lake of considerable size could be seen about ten miles off, the shores of which were white with salt. All round this salt lake, and as far east as one could see, the country appeared to be most desolate and barren; a few rocks and stony hillocks rose here and there, breaking to a certain degree the dreariness and monotony of the landscape, but so still was the scene —without a bird or beast moving—that it might have served Doré as an illustration for Dante's *Inferno*.

Our marching powers had so far improved of late that Sabhana and I were able to dispense with the use of our ponies, which was, perhaps, just as well, for mine (which was the polo-pony bought at Leh) showed symptoms of acute poisoning as we were making for the spot where we expected to find the camp. It was with the greatest difficulty that he was kept on his legs; but he was urged on relentlessly whenever he staggered and attempted to lie down, though every minute we fully expected to see him drop down dead. The treatment adopted was certainly beneficial, for he seemed quite free from pain soon

after reaching camp. The attack was due, I am inclined to think, to his having seized the opportunity, while I was plane-tabling, to eat large quantities of a soft-leaved plant covered with purple flowers, resembling clover, of which all the ponies were passionately fond.

Considerable difficulty was experienced in locating the exact position of the camp, but a thin column of smoke eventually revealed its whereabouts.

During that night one of the ponies died, but this did not very greatly affect the transport, as he was a poor beast and had never carried anything but the smallest of loads, and I was only surprised that he had outlasted many apparently stronger animals.

As grass was now plentiful and Indian corn scarce, the allowance of the latter was cut down from this date to two teacupfuls *per diem*.

The next morning the camp was astir early, for, in addition to the day's march, we had to climb a mountain of considerable height lying to the north. The day being fine and the air clear, a clear view was obtained from the summit of the country beyond for a distance of about 100 miles. It was a most cheerless prospect! An immense barren plain stretched away to the horizon—without a vestige of tree or shrub, or, so far as could be seen, a blade of grass; the monotony was broken only by rocks, small ridges and salt lakes. The outlook, indeed, was so uninviting that we determined then and there to alter our course and move due south, for it was obvious that little would be gained by pushing forward into this desert, since we could make out from our present position as much of the nature of the country lying to the north-east as could be verified by fully five days' marchings.

Other considerations also influenced our plans.

The short Tibetan summer was already drawing to a close, though it was only August 10—grasses and flowers were dropping their seeds, and the wild animals already had a thick growth of new wool underneath the older and thinner hairs; again, our commissariat was very severely taxed by the number of mouths which had to be filled—twenty in all—and so rapidly were the supplies of rice, suttoo and flour diminishing, that it was evident, at the present rate of consumption, they would not last more than three weeks, while there was only sufficient grain for the ponies for another eight days.

We now longed to come across the Tibetans whom we had previously desired to avoid, for we believed that if encountered in considerable numbers, they would sell us grain in plenty—at a price.

Before turning south, however, it was necessary to cross a low range of hills. On the summit of the pass two fresh-water ponds were found, but Khalik, who had preceded us with the caravan, decided to go on for a few miles farther and camp on lower ground. When we ourselves arrived in camp, after completing the work on the mountain, the men were found digging vigorously in a vain attempt to find water, while 300 yards away was a fine fresh-water pond! Every man must have passed close by this pool, and yet not one of them had seen it.

It is a remarkable fact that these men, although they had always lived a more or less nomadic life, had but very little idea of the "lie" of a country or of places where grass and water were likely to be found. It is, moreover, generally supposed that those accustomed to a wild life in a country where the view is unrestricted possess remarkably long sight; but this was not the case with our party, for, on the whole,

their eyesight was most indifferent—not one of the men could see as far or as distinctly as the average Englishman who goes in for shooting, and in locating objects I hardly know whether the Kashmiris, the Yarkandis or the Ladakis were the more incapable.

Close by the tents there stood what we had come to regard as our daily rations of meat, viz., an antelope; it was promptly shot, much to the relief of the men, who had begun to fear that their meat supply might be lost before we arrived.

The animal was brought to the tents, and we gained a further insight into the unpleasant customs of the Ladakis. Tunduk, a wiry old man, was set to work to remove the flesh from the skull—a task obviously congenial, for, as he took off the flesh, he kept popping the daintiest morsels into his mouth, till his appetite was appeased. He rarely ate cooked food at any time, preferring the meat in its raw state, and most of the men consumed with relish flesh that was either raw or barely warmed through. It is to be remembered that five hundred years ago the Chinese reported that the Tibetans were cannibals, but, in the absence of any proof, it appears more probable that this disgusting habit of eating raw flesh afforded the basis for this assertion.

Another practice of frequent occurence amongst the people in this part of the world is that of catching in a bowl the blood of a sheep or goat when they cut its throat; they then throw some suttoo or barley-meal into the steaming blood, stir it into a paste and eat it at once.

On August 11th we changed direction and turned south, crossing first a broad stony plain and then a wild and rocky ridge; small streams meandered in all directions, but grass was excessively scarce. After

covering thirteen miles, the prospect ahead seemed so uninviting that we decided to halt.

At 2 a.m. the camp was struck by a hurricane, and Hargreaves' small tent carried bodily away. All hands were set to work to place yakdans, boxes, etc., on the pegs of the other two tents, in order to prevent a similar fate overtaking them. This storm, which died away as quickly as it came, was accompanied by intense cold—the thermometer falling rapidly from 35° F. until it registered 18 degrees of frost.

The journey on the following day was delightful, but we were still confronted with the grass and water difficulty; at one camp there would be gallons of water but no grass, while at another there were acres of grass but no water. We halted at the most likely spot to find this precious liquid, but, though we dug hard in all sorts of places, it was two hours before our efforts were rewarded by a very limited and dirty supply, which had to be augmented by melted snow. It takes a good deal of water to satisfy the thirst of twenty men and twenty-five ponies, and night fell before all had been attended to.

On occasions like this my battered basin was found most useful for baling water out of the wells, while Hargreaves' collapsible bath was invaluable for storing the supply for the ponies; it was, indeed, much more useful for watering the animals than for bathing purposes—the climate does not encourage indiscriminate ablutions, nor does much cleansing appear to be necessary. The natives never wash at all, and do not seem to be in any way inconvenienced.

We had lately been much exasperated by Khalik, whose behaviour was certainly most trying. He never endeavoured to make the best of things and thus set a good example to the men, but always proceeded,

on reaching the camping-ground, first, to inform us how tired the ponies were; next to grumble at the scarcity of water; then to complain of the paucity of grass; ending up with the statement that he was convinced the ponies would all die, and that it was a bad look-out for everyone. As a sort of final artistic touch to his doleful prognostications, he would then say his prayers in the most conspicuous place possible. Hargreaves and I had already discovered what a wolf in sheep's clothing this man was; but we were careful not to offend him, for it was generally understood that his services would be priceless should fate lead us into the hands of the "bloodthirsty" Tibetans.

On the following day we climbed a great mass of rock, cut up by numerous ravines, with the idea of doing some triangulation work; the morning had been clear and frosty, but before reaching the summit the wind sprang up, clouds appeared as if by magic, and successive hailstorms drenched us to the skin and obscured the view.

On the top of the mountain a cairn of stones was unexpectedly discovered, evidently erected by nomads, but why these people should have gone out of their way to ascend this hill we were at first unable to understand. Later on, we came to the conclusion that the cairn acted merely as a local landmark, possibly indicating the region of some auriferous soil. We managed to complete our work after a fashion and returned to camp, wet and miserable.

"Our daily buck" was waiting for us close to camp, and was shot by Hargreaves in due course; the men now consumed one entire animal a day—an average antelope, when it is cleaned and ready for cooking, weighs about 55 lb., but on no occasion was there ever any meat left when the camp was struck. One of the



SHOEING PONIES NEAR LAKE MARKHAM.



DIGGING FOR WATER. THE BATH BEING USED AS A TROUGH.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

drivers, Ghulam Nabi, became ill through over-eating; like many others who are addicted to the pleasures of the table, he was very loth to believe that his illness was due to this cause, and, as he continued to gorge himself, his digestion grew worse and temporarily incapacitated him from all work.

At this camp we rested for a day, and found it very pleasant to rise late and while away the time with the various odd jobs which continuous marchings render so necessary.

It snowed during the night, but the ponies had a good feed of grass and sufficient time for a nap besides; actual rest and sleep was a luxury to which they were quite unaccustomed, for as a rule their time was fully occupied in trying to fill their stomachs. Most of the ponies had lately improved in condition, and were looking much better than when they left Yeshil Kul, twenty-two marches back.

Hargreaves went out shooting in the morning and brought back to camp a fine bag of game, consisting of an antelope, a leash of hares and two brace of sand-grouse. In the course of his expedition he came across an old camping-ground which had been occupied only a year or two before by a large number of men, yaks and goats. A wooden bowl and a round stone where-with to wash gold were discovered, showing that the men were probably gold-seekers, though no actual excavations could be seen.

We moved on again next day through a country rich in grass but poor in game. Hail and snow fell during the march and thoroughly soaked the soil, and as our bedding was always placed on the bare ground, the dampness added one more pleasure to the joys of Tibetan travel and to the chances of rheumatism in years to come.

CHAPTER XIII

HARD AT WORK

It was now the 15th of August, and the nights were becoming much colder, the minimum thermometer registering, as a rule, about 10 degrees of frost; in the hottest hour of the day the temperature did not rise above 40° or 50° F. Of late we had been slowly but steadily descending, and the plains were now only some 16,000 feet above sea-level.

Antelope were becoming scarce, but fortune favoured us and we were still able to obtain a regular supply; flour, however, was diminishing at a far too rapid rate, and in order to reduce the consumption of this precious article, our diet was practically restricted to meat. Hares and sand-grouse helped to keep the larder full, but the Mussulmans, as long as they could get any antelope-flesh, would never touch the former.

Hargreaves and I usually breakfasted at 6.30 a.m., an hour that at the best of times is not marked by excessive merriment; whilst the monotonous fare of antelope, roast, fried or minced, caused our thoughts often to turn towards eggs and bacon and fish. One day we thought antelope tongue boiled would afford a welcome change, and collected four for our breakfast. They were cleaned and placed on a board outside the cook's tent, ready for cooking. Old Tunduk had, however, spied these delicacies; and, sidling up to the tent with a smile on his face, sat down

and made himself agreeable. The moment the cook's back was turned, Tunduk ate all four, raw though they were; nor could he be made to understand what a crime he had committed in thus devouring our breakfast, but persisted in treating the matter in a playful spirit, and the more he was reproved the more he laughed.

Tunduk's smile was a wonderful sight, for having no front teeth he disclosed a gaping void on parting his lips. We took the trouble to question him once as to how he had come to lose them, but he was very reticent on the subject; from the other men, however, we learnt that some years ago Tunduk had visited the shrine of his god at Rudok, and when praying before the image was suddenly seized with religious fervour; being very poor and having nothing to give as an offering, he knocked out his front teeth and laid them as a propitiatory gift on the altar!

Our route now ran west for one march and then turned south again; the weather improved, work progressed steadily, and animal life again became more evident, as we encountered yaks, kiang, antelope, hares, ram chikor and, what surprised us very much, a pair of hoopoes—it was certainly astonishing to find this beautiful bird living at these high altitudes and in so cold a climate.

Hargreaves promptly stalked the yaks. As they fed into one ravine, he made his way up the next, and got on terms with them at short range at the junction of the two nullahs. The leader was brought down with a shot from the ·303 with a Rigby flat-nosed split bullet. The choicest parts of the flesh were brought to the camp, and during the next fortnight many attempts were made to eat it, but without success —it looked like indiarubber and tasted like leather.

Nearly 700 miles had been covered since leaving

Leh, and, as a result of the continuous marchings, the soles of our boots were worn to the thinness of paper; the rough stones knocked out the nails and the sharp rocks cut the leather to pieces. They were mended over and over again with pieces of yak-skin, but we were almost in a barefooted state, and this was fully realised on descending a hillside over sharp, loose stones.

On our way to Camp 54, on August 19th, Ram Singh, Soonam Sirring and I, climbed a high and trying hill; Ram Singh certainly required some persuasion to mount its slopes, but Soonam Sirring, though handicapped by having to carry the plane table, was as fresh and keen as ever, and reached the top before either of us. Our exertions, however, were well rewarded, for not only did the pinnacle form a fine triangulating point, but a splendid view of the country was also obtained in all directions.

The mist and fog had lifted, and we could see, far to the north, the Kuan Luans, a mass of snow; to the south-west was the Largot Kangri range, with its white and black pinnacles reaching up into the blue sky, while in the middle distance lay a great lake; southwards, the distant mountains were still veiled in cloud, and the easterly view was made up of rolling plains, salt lakes and rocky ridges, most of which ran from north to south.

Game became even more plentiful—marmots, foxes, and sand-grouse being added to the list of animals seen on the previous day. Many yaks were encountered—mostly cows with their young; but, as Hargreaves could not find a sufficiently large head, he did not fire at them. More gold-diggings were observed, which had evidently not been abandoned for any great length of time, as the old water-runs and dams were clearly defined.

That evening, Khalik, with his most insinuating air, informed us that only fourteen days' rations remained —oddly enough, this was the exact number of days in which we could reach Rudok if forced marches were made. At Yeshil Kul we had given the men liberal supplies of food to last them three months, and they had practically demolished it all in one month; no compunction was therefore felt in telling them that as soon as all the stores were finished, they were quite at liberty to go without, and that it was our intention to travel slowly and do little shooting, as we seemed to be coming to a country full of game.

There was some grumbling among the Yarkandis, and much bemoaning at their ill-luck; they declared that many of them would surely die. "All right," we answered; "in that case there will be all the more for those who survive;" but this rather feeble joke was not fully appreciated. Having, however, become thoroughly disgusted with their greedy ways, we were glad to find the lesson was not entirely wasted on them, for from that day they ate less and wasted nothing.

We noticed that kiang gave birth to their young at a much later period of the year than most other animals, for on August 19th two young ones were seen but newly born. They were with their mothers on the very highest point of the range up which we had climbed to do some theodolite work; whether the young had been born there, or had been taken to that out-of-the-way place for safety's sake, it was impossible to determine. A few days later, a baby kiang was caught out in the open by the camp-dog, and unfortunately killed before anyone could reach it.

During the first watch that night the ponies stampeded, in spite of all our precautions; wolves in large numbers were howling round the camp, and this

eventually set the ponies off at a mad gallop. We turned out, but found it was useless to try to round them up then, as they were lost in the darkness in a moment; we accordingly retired to rest, much disgusted, but hoping for better fortune in the morning. At the first streak of dawn the camp was astir, and men were sent off in pairs in search of the missing animals; the difficulty of tracking them was increased owing to the stony nature of the ground.

A sturdy Argoon, of minute stature, named Aziz, proved to be the successful scout in this case; he tracked them for many miles, finally running them to earth in a side nullah. Not one of the troop was missing; one and all had escaped the wolves, which had possibly given up the chase on seeing the bony nature of their quarry.

I think, however, that very few ponies are killed by wolves in Tibet. There may be some isolated cases during a very severe winter, but, as a rule, it is unusual to see more than two or three wolves together (I did, indeed, once see a troop of five in the Changchenmo, but this is quite exceptional), and these animals would not attack ponies unless they were themselves assembled in considerable numbers.

Rain fell every day, soaking the ground thoroughly and making our sleeping-places softer, but in no other way rendering us more comfortable.

From Camp 55 the caravan made its way along ravines and around spurs, while Ram Singh and I pursued our usual practice of climbing a hill and then coming down again. On this occasion, however, we were quite defeated by the lie of the ground. When we fondly believed we were about to reach our goal, a rocky pinnacle, we were suddenly confronted with a precipice, and were compelled to take a cir-

cuitous route, involving a descent of 1000 feet, before a fresh start could be made on our upward way. Our tempers were naturally ruffled, and when the station was finally reached we found that work could only be carried on with great difficulty, on account of continual hailstorms; it had to be given up altogether at last, as a heavy thunderstorm swept up from the west, drenching us to the skin and freezing us to the bone. Ram Singh frankly declared that he would rather have six months' imprisonment than undertake another surveying trip in Tibet.

On descending from the mountain it was barely possible to make headway against the wind, so strongly did it blow; the struggle, however, kept us warm, and on reaching camp our discomforts were soon forgotten in the peaceful enjoyment of shelter, warmth and many cups of boiling tea.

Our usual marching routine was something as follows: the caravan would move ahead in the required direction, taking the lowest and easiest road; Hargreaves followed the path which seemed to offer most sport; while Ram Singh and I made for the nearest desirable hill. As closely as possible, the position of the next camp was fixed beforehand—in any case, the direction and the length of march was agreed upon. Though this seemed to be the only feasible plan, it was nevertheless open to many objections; the direction might be mistaken or the distance wrongly estimated, whilst the absence of fuel, grass or water at the spot previously fixed on would necessitate a further onward march of the caravan for perhaps another four or five miles.

There are few things more trying to the temper than to arrive, tired and hungry, but buoyed up by thoughts of tea and a hot joint, at the spot where

one feels sure the camp should be, only to discover not a sign of man or beast; shouting and firing of shots are of no avail, there is nothing for it but to brace oneself up to climb yet another hill, from which to sweep the landscape once more with the glasses.

At last it may be that a pony, a thin column of smoke, or a figure outlined against the sky is descried, and then the weary tramp is recommenced. One arrives in camp sulky and angry; everyone is to blame (except, of course, oneself); everything looks wrong. Gradually, however, shelter, warmth and food begin to have their effect; the aspect of things alters, all is forgiven—after all, the men were right; one should have known that they would halt at this, the best of all possible spots; and eventually tranquillity is restored.

From our hill that day, Ram Singh and I obtained a fine view of fifty miles or so in a southerly direction. Five lakes were seen, each in a basin of its own; probably all were intensely salt, as their banks, and indeed the whole country round, were covered with saline deposit. The depressions in the surrounding land seemed to be the empty beds of great lakes, which had dried up at a no very remote date; they had a horribly deathlike appearance, not a blade of grass or boortsa growing, not a beast or bird moving; desolation and stillness reigned supreme. On the ridges, however, grass grew freely, hares scurried about, and kiang roamed hither and thither, while in the dips the mighty yaks slowly made their way over the rich young grass. Small rivulets in every nullah trickled with a gurgling sound down to the pit below.

These salt ponds will probably disappear entirely in a short time; one of them, in fact, had already



AT SURVEY WORK WITH SOONAM SIRRING.



HUPING TSO.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

done so, leaving a snow-white sheet of salt and soda, six square miles in extent.

Two short marches now brought us to the shores of the lake seen some three stages back, and which Khalik announced to be Huping Tso, "the drinking water of the giants." As Khalik had never been near the place before, and as we had met no Tibetans for two months, it was probably an effort of his imagination—until better information can be obtained, however, the name must stand. The lake is evidently well known to the Tibetans, for numerous old fireplaces were found by the water's edge.

Huping Tso is of an unusual shape as Tibetan lakes go, for it boasts an island and a rocky peninsula; its waters are beautifully fresh, the shores and bed sandy, and weeds grow from the bottom in great abundance. Thousands of fresh-water shrimps were seen but no fish. This was the first sheet of fresh water of any considerable extent we had come across for two months, and the sight of it was highly appreciated.

CHAPTER XIV

ARU TSO

THE caravan now left the shores of Huping Tso, crossed some low spurs and debouched into a large plain, rich in grass, where the camp was pitched on the banks of a fresh-water stream which ran westwards and bore away the surplus water of the lake. The bed of this stream was full of weeds, but again no fish were visible; the waters finally ended in one of the salt lakes lying to the south, and were there absorbed by evaporation.

We were now well in sight of the Aru Mountains, whose rugged peaks, towering into the sky, presented a fine and impressive spectacle. These heights had previously been fixed by Captain Deasy, so we determined at this point to bring our triangulation to a close. The halt, however, was prolonged by the unfavourable weather, as snow covered the ground, and all the mountain-tops were enveloped in mist.

On August 26th the weather cleared, and work was pushed on with energy. On our reaching one of the points necessary for theodolite work, a fine bull yak was seen grazing in a nullah about a mile away.

Information was speedily sent to Hargreaves, who was in camp at the time, and he hastened out to stalk the patriarch. The Kashmiri who had already seen the animal very nearly wrecked the expedition, for he led Hargreaves, with the wind at their backs,

almost on top of the beast; fortunately, however, the error was noticed in time. Hargreaves retraced his steps, executed a long turning movement and managed to approach within eighty yards before he was seen. Then two shots, fired in rapid succession, brought the animal down; like the dying fighting bull of the Spanish arena, he spread his legs apart, and stood thus till death put an end to his troubles.

This yak carried a fine pair of horns, thirty-four inches in length, and was a very ancient animal, with teeth worn right away. Although the stomach was found to be fairly full of grass, we had probably performed a merciful act in killing him, as he would otherwise have soon perished miserably of starvation.

We determined to take full advantage of the fine weather, so for the next two days utilised every available moment until all the desired work had been accomplished; from this time forward we devoted our energies to simple plane-tabling, to shooting and to the formation of plans whereby to circumvent the Tibetans, whom we daily expected to meet. Of late much less anxiety had been felt with regard to the transport; for the ponies, thanks to the plentiful supply of grass, had improved marvellously in condition, and presented quite a respectable appearance. Many of them were endeared to us, for they had served us well and were plucky workers; a few, too, had charming manners, and fearless and affectionate dispositions; they had learned what was required of them, and knew the day's routine quite as well as human beings. The loads became lighter day by day, and by continuing to travel on foot—a mode of progression to which we were by now well accustomed—great hopes were entertained of bringing most of our four-footed friends safely back to civilisation.

On August 28th we made a fresh start, and, with no anxiety about triangulation, completed a sixteen-mile march. The caravan, however, did a much longer round, as Khalik supposed that he had found a short cut, and ended by boxing the party up in a rocky ravine.

Food now began to run short, and we were able to discriminate between our followers, all of whom had previously seemed to us to be much of a muchness; there is nothing like a little hardship and privation to bring out the good and bad qualities of a man. Of the Ladakis I have already spoken—they were altogether excellent. Three out of the four Kashmiris were worse than useless; Sumdoo of Wataila, one of the cooks, was an admirable servant—his compatriots were the reverse; on the whole, the Argoons were good—two of them, however, rejoicing in the names of Ghulam Nabi and Mahi Din, were first-class scoundrels and bosom friends of Khalik.

That night the camp was pitched a few miles east of a small salt lake, into which two streams emptied themselves, and which was surrounded by the richest grass. The lake has an are of four square miles, but must, at some remote period, have occupied about seventy square miles and filled up the entire valley, for the ancient shores are distinctly visible on the surrounding slopes, 200 feet above the existing level of the water; the lake was bitterly salt, and the neighbouring land white as snow with saline deposit.

In earlier times, Aru Tso, Memar Chhaka, and this basin doubtless formed one large irregular sheet of water, which received its supply from all the surrounding ranges; as the snow and rain fall decreased, the lakes dwindled in size.

Immense numbers of antelope and gazelle wandered



ARU TSO.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

over the bright green pastures; of the former, two of the finest were secured, but the gazelle kept well out of rifle range. The next march of twenty miles brought us to the shores of Aru Tso.

This lake lies, roughly, north and south, whilst the southern end is much broadened out by a bay; it is fed by innumerable streams which flow from the Largot Kangri and the mountains to the west and south.

In 1891, Captain Bower, when encamped on the shores of Aru Tso, said that the waters were "salt, of course, like nearly all the Tibetan lakes"; six years later, in 1897, Captain Deasy remarked that the waters were "drinkable"; in 1903, we found that the water was fresh, without the slightest flavour of salt or soda. This is certainly an interesting and important fact; the country has not appreciably altered in its main features in this short period of time, each visit was made at about the same time of the year, and yet there are three different reports. If this change has occurred in the case of one lake, there would seem to be no reason why it should not happen to some of the other large sheets of water which are found all over Tibet.

The scenery about Aru Tso was extremely beautiful; although there was still a complete absence of trees and shrubs, the mountain ranges of all colours and forms, the glaciers, the snow-peaks, the green valleys and the deep blue water of the lake formed a perfect picture.

Especial care was now exercised lest our animals should be stolen at night, for the locality bore an evil reputation for brigandage. According to Dr. Sven Hedin, five chukpas or robbers were caught here two years ago by Tibetan officials and beheaded, and six years previously Captain Deasy's camp was attacked

and looted in his absence and his most valuable animals driven off. We therefore provided the watch-guard with a rifle and ammunition, and every night it was used—ostensibly fired at wolves, but really, as one man admitted, to show that the watch was awake and to give a feeling of security to the remainder.

The caravan experienced much difficulty in passing along the southern shore of Aru Tso, as the beds of the numerous streams flowing from the south-west were most treacherous, in many cases being nothing but quicksands. Two inches of crystal-clear water, trickling over a sandy bed, presents an attractive appearance to a hot, tired pony. At one of these places two of the animals were nearly lost, and it was only by the plucky efforts of the men that a catastrophe was averted. Ropes were speedily fastened to the sinking ponies, and they were hauled out by the head, tail, legs or saddles; but the members of the rescue-party were almost involved themselves, and were only able to keep on the surface by rapidly moving their feet.

Game was plentiful on the shores of the lake and along the ridges—yaks, goa, ovis ammon, burhel and antelope. At first luck was dead against us, Hargreaves and I tramping over hill and dale from daybreak to dusk and obtaining no sport whatever. The nyan were small, with horns of not more than twenty-eight inches, the gazelle were all does, the antelope were not wanted, while we missed the burhel and failed in our stalk after yak. The last failure somewhat ruffled our equanimity on account of the attendant circumstances.

I had climbed up a high ridge, and, together with Sabhana, was making my way along the top, when four fine yaks were seen grazing in the valley below in a

perfect position for a stalk; they were feeding on the far side of, and about 100 yards distant from, a small hillock. Hargreaves, who was working round the lower slopes and who had been in view for some time, saw the animals at the same moment. We attracted each other's attention by waving our arms, and agreed on our plan of action by means of semaphore signalling. Sabhana was leading a pony which had been brought along with us, and I now ordered him to take the pony on the other side of the hill from where I was, and when he heard a shot, to bring it to the spot where the yaks were grazing.

We then started our stalk with a favourable wind, Hargreaves from below and I from above; we approached slowly but steadily, but, when distant about 400 yards, one of the yaks became alarmed, threw up his head and stared at the ridge some 200 yards to my left; then the others followed suit; their great black tails waved in all directions—a sure sign that they scented danger. We were quite at a loss to understand the cause, as they were looking neither at Hargreaves nor myself, whilst the wind was in the right direction. The excitement, however, was certainly there, and, moreover, it increased; the animals slowly advanced, halted, and then turned tail and bolted!

I rose from my crouching position and saw—our precious shikari, Sabhana, quietly walking down the hill about 200 yards from where the yaks had been, in full view, dragging the pony behind him! This expert (!) huntsman, whom we had brought with us for a thousand miles to assist in the pursuit of game, was quite unable to give any reason for his extraordinary conduct, so in future he was relegated to the position of gun-carrier, with orders to remain far in the rear, where he could do no harm.

CHAPTER XV

A PLEASANT INTERLUDE

THE weather during the last few days had been glorious, and though the cold increased day by day, for nearly a month from this date we were favoured with still and cloudless weather. Our worries and anxieties were mostly over and were already nearly forgotten, and the free and healthy life in the midst of fine scenery and the perfect air combined to make our lot a pleasant one.

From Aru Tso we struck due west, the caravan passing right through the mountain range; the path wound along the bed of a stream at the bottom of a ravine whose precipitous sides rose sheer above for many hundreds of feet. As we were now bent on sport, Hargreaves took a road to the north over the steeper slopes, whilst I made a wide detour to the south, passing through a ravine similar to the one traversed by the caravan.

The invaluable Khalik halted three miles short of the place previously selected for our encampment, with the result that I came upon the camp quite unexpectedly, while Hargreaves was nearly left out all night. Search-parties supplied with candles were despatched to look for him as soon as it grew dusk, and large fires were lighted on the neighbouring knolls; fortunately he saw the latter, but as the night was as

dark as pitch and several nullahs intervened between him and the camp, it was midnight before he arrived, tired and hungry. Between us we accounted that day for three fine yaks, though in each case the heads were disappointing, and the difficulties of transport compelled us to discard the skull and horns. I had also come across several herds of burhel, some of which contained good heads, but with these I was not so fortunate. I fired at one magnificent specimen, but, being forced to take a long shot at about 300 yards, misjudged the distance, with the result that the bullet passed just over the shoulder.

On arriving in camp, a champa appeared on the scene; he was not more than thirty years of age, but was as wrinkled as an old man of ninety. His outward appearance was not prepossessing—he was indescribably filthy, wearing the usual sheepskin robe, the wool of which was matted with blood and dirt, whilst his long black hair hung in wild profusion round his face. A sword was stuck through his girdle, the sheath encrusted with turquoises and coloured stones, while the blade was of soft iron, chipped and rusty.

On seeing him, our thoughts at once turned towards flour and suttoo; but he declared, with much bowing and scraping, that he was quite out of these commodities and had himself been hoping to obtain supplies from us. He stated that he and his family, together with sheep, goats and three yaks, one of which was lame, were slowly travelling towards their home, distant about eighteen marches farther south. The two wives and four children all lived together in one tent, of the usual Tibetan pattern and made out of yak-hair cloth. We speedily got to business, and opened up trade by presenting him with the flesh of the three yaks shot, and bought three of his goats,

as our drivers were longing for a taste of this evil-smelling animal; he then agreed not only to lend us two of his yaks for two marches, but to accompany us himself. This addition to our transport was most welcome, and as our friend informed us that, at the end of the two marches, he would show us a good nullah for ovis ammon, we readily agreed to all his proposals. Early the following morning he appeared on the scene with his two wives, four children and two yaks.

The nomads who wander over these valleys are, generally, of a nervous and timid disposition, wishful of nothing but to be left alone and in peace; they are nevertheless armed to the teeth, as they desire thereby to terrify the stranger, whom they look upon as a natural enemy. As a rule, a man is accompanied by his whole family, together with their sheep, goats and worldly goods.

The men are of short stature, averaging four feet eleven inches to five feet, while the women are considerably smaller; they seem, however, to be hardy, and certainly contend successfully against most unfavourable general conditions; their faces, hands and bodies are indescribably filthy, but they appear to suffer no ill-effects from the dirt, either in health or comfort; when the dirt is removed, their complexions are of a rather sickly olive tint, though the women and children sometimes have a little colour in their cheeks. The teeth are very bad, usually ill-formed or protruding, and not infrequently altogether destroyed; this may be due to the fact that, from babyhood to old age, they subsist almost entirely on the flesh of animals, which, in a half-cooked or wholly raw state, they tear from the bone as a wild animal tears its prey. Flour, *tsampa* and sweets are only partaken



NOMAD FAMILY OF WESTERN TIBET.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

of by the more wealthy; tea of an indifferent quality, obtained from China, is their principal beverage. Indian tea is not regarded with favour.

The men seldom wear pigtails, but allow their black, greasy hair to grow long and wild; a few straggling hairs protruding from above the corners of the mouth form their only facial adornment. The women pay rather more attention to their personal appearance; their faces occasionally show the effects of an attempt at cleanliness, and they assist nature by plaiting and decorating the hair, adding touches of colour with turquoises and coloured beads.

Men, women and children clothe themselves entirely in roughly tanned sheepskin cloaks, with the wool on the inner side. Their coats, when loose, reach well below the knee, but during the day are tied up round the waist; at night, the girdle is removed, and the coat drops down so as to form a sleeping-garment. The right arm is kept bare in fine weather. For headgear, small round caps made of sheepskin, with ear-flaps, are worn. Trousers and boots made in one complete the garb. A sword, made of soft iron and usually much chipped and rust-eaten, is stuck into the girdle and crosses the body in front; this weapon is used as a means of attack and defence, for the killing of animals and for the cutting up of food.

The nomads, though generally cunning, treacherous and untruthful, are clever in the management of animals, hard-working, uncomplaining and apparently indefatigable; they require little or no pay and about as much food, though if meat is plentiful they will gorge themselves to repletion. As soon as they understand that they have nothing to fear, they quickly make themselves at home with strangers, giving and receiving freely.

On the next day Hargreaves and I changed places, he taking the southern and I the northern route, while the caravan, as before, moved in a straight line between us; we were both fortunate in bagging a fine yak.

I came upon mine somewhat unexpectedly, as he was dozing in a small ravine; the wind was favourable, the distance right and the position good, and no tedious stalk was therefore necessary. The head and shoulders were turned away from me, and on account of the immense amount of flesh and bone which the bullet had to penetrate at this angle, it expanded before reaching his heart.

In an instant he was on his legs and galloping down the valley; two shots, however, from the ·303 in rapid succession stopped him, and after a few seconds he slowly turned round and sank upon his knees. I clambered down the slope, and almost came on the top of him before I realised that he was not yet dead. I saw a black mass of moving hair, a waving tail, a lowered head and a beady black eye—for a moment we faced each other, and then I turned tail. My retreat was, however, brief, and fairly dignified, for the yak never moved an inch. The attack was quickly renewed. Round and round we circled, he with the object of keeping me in front, I with the desire of finding a vital spot exposed. At last an opportunity occurred, and the mighty beast staggered and sank with a bullet through the side; but although both shoulders were broken, he again struggled to rise, and three more shots were needed before the immense head was slowly lowered and the yak lay dead.

Sabhana and I were by ourselves, and six weary hours were spent at the task of separating the head from the trunk; it proved to be almost too much for us, owing to our inability to turn the body over.

We persevered, however, taking turn and turn about, until at last the work was finished.

The question now arose as to how to get the head to camp, for it weighed about 100 lb., and neither Sabhana nor myself were particularly anxious to tackle it; we accordingly decided to give the load to the pony. This animal, however, happened to be at the moment decidedly fractious, and nothing would persuade him to let us bring the load near; though he could not make any complaint by word of mouth, he had plenty of ways of making himself disagreeable and his intentions perfectly clear. Round and round he went, we doggedly following, dragging or carrying the head between us.

Then we tied his forelegs together, whereupon he reared on his hindlegs; then his eyes were bandaged and his ears tied with string, and we thought that we had overcome our difficulties. But our triumph was short-lived, for we found it impossible to tie the head on to the saddle; first it slipped to one side, then to the other, and when we fancied that the task was mastered, the first movement of the pony brought the head to the ground with a crash.

We struggled like this for an hour, hot and angry, abusing the pony and loathing the trophy, until we decided to leave it altogether. I suggested that some of the lazy fellows in camp should fetch it in for us, and Sabhana offered no objection. We therefore left the head where it was, covering it with ropes, so as to give the wolves the idea that a trap had been laid to ensnare them.

Next morning our ruse was found to have been successful, for the carcase had been attacked, but the head, with its suspicious-looking ropes, was untouched.

On the way back to the tents, which of course

were not where we expected to find them, many old camping-grounds were passed. At this date, however, September 1st, the valley was uninhabited, as the wandering bands of nomads who had been here earlier in the year were now on their way southward, for winter was steadily approaching.

CHAPTER XVI

TROUBLE WITH THE MEN

We halted here a day in order to bring in the yak's head, and though both Hargreaves and I originally intended to take matters easy, the chance of securing a fine ovis ammon proved more than we could resist, and before the sun was high in the heavens both set off in search of sport.

After much exertion I succeeded in climbing a rocky ridge which lay five miles to the south, though my efforts were quite unrewarded, for I could see nothing but doe antelope, doe gazelle, and female nȳan.

Hargreaves, however, was more successful; he discovered three buck gazelle, and, as he stalked them from above and the wind was in the right direction, succeeded in bagging all three. These gazelle or goa are the most beautiful of all the gazelle species, and are perhaps among the loveliest animals in creation.

A herd of about 300 cow yaks and young were seen grazing on the hillside within a mile of the camp, but they took no notice of us, and it was not until the following day, when the wind changed and they got our scent, that they changed their position.

The native guide led us to believe that the long-expected ovis ammon nullah would be found at the end of the next march, and that an old gold-digger and his son had taken up their abode in the valley.

Though the ovis ammon were conspicuous by their absence, we came upon the two human beings quite unexpectedly, as they were peacefully cooking a meal beneath an overhanging rock. They expressed no surprise at our appearance, and after a short greeting, continued their culinary operations with perfect unconcern.

They were a curious pair. The old man must have been seventy years of age, while his son was not more than five. They certainly presented an interesting study, for with nothing but an overhanging rock for shelter and a hole in the cliff as a storehouse, they were living in squalor and poverty, but in perfect content. The quarters of a kiang lay on the ground, together with a few dirty rugs, a bag of tea and a rusty gun; a cooking-pot was suspended over the fire, but neither flour, sugar, nor salt were visible.

The old man seemed frank and straightforward. He told us that he and the child had come to the valley six weeks before to dig for gold, during which time they had lived on wild asses' flesh; that much rich earth was ready for washing, and that he expected his wife and other sons to arrive in a few days to help him finish the work; he added that he had tea, but no other luxury.

The child was a weird little creature, with matted hair and protruding teeth; he was practically naked, wearing only a sheepskin over his shoulders, and showed not the slightest fear of us. On rising the following morning, we saw him seated, comfortable and happy in his scrap of sheepskin (though there were 20 degrees of frost), tearing at a great piece of half-cooked meat and gnawing at the bone. We gave him half a tin of condensed milk, with which he was hugely delighted, promptly sticking his dirty

little fingers into it and sucking them until they finally became clean.

Our late guide here took leave of us and handed us over to the care of the old man, who expressed his willingness to accompany us for two marches, together with, of course, the small boy; farther than that he would not go, for fear of the authorities. He told us that when he had started from Leh in June, the news of our entry into Tibet had reached Rudok, whereupon the dzongpon of that place had ordered out the soldiers in his district and sent them all over the country to search for us, with orders to find and turn us back along the road by which we had entered. The search was fruitless, though the soldiers were away for a fortnight; on their return to Rudok, they had informed the authorities that we were nowhere in Tibet and had in all probability crossed into Chinese Turkestan.

The old Tibetan carefully stowed away in a hole the kiang flesh and the dirty odds and ends, and covered them up with stones; then we set out. The morning was very cold, and the swift running river frozen to a depth of half an inch. The passage was consequently bitterly cold for those who could not get a ride, and there was not room for everyone; we had intended to put the boy on a pony's back, but he waded through the icy water of his own accord with perfect unconcern.

The journey was a long and fatiguing one of twenty miles, over a great stony plain, where neither water nor grass were to be found; nevertheless, antelope were seen wandering about and wild yaks were grazing on the spurs to the east.

During the latter half of the march the ponies straggled badly, and on returning to the road taken

by the caravan from a stalk after a goa, I came across two of the ponies, quite worn out, being helped along by Soonam Tilney and Tunduk. Both animals were heavily laden, and as the chances of their reaching camp with their present loads were small, rugs, skins and horns were cast away, and the smaller articles given to the men to carry; with their loads thus lightened, the ponies managed to reach camp as dusk set in.

Now it should be understood that Abdul Khalik, the caravan-driver, was in charge of all the animals, and Soonam Tilney, to whom these two ponies belonged, had requested on the march that they might be relieved of a portion of their loads. Khalik bluntly refused, and apparently added a few unpleasant remarks.

Of late the ill-feeling between the Argoon Mussulmans and the Ladaki Buddhists had been steadily increasing; it had originated in the natural antipathy between the two races, and had grown as they had been thrown more and more together.

On reaching the camping-ground, we demanded an explanation from Khalik of the desertion of these ponies; he denied all responsibility and accused Soonam Tilney of disrespect. We severely reprimanded him, upon which he turned on his heel and made for his tent. Ten minutes afterwards, when having tea, we saw Khalik, laden with rugs, bedding etc., pass in front of our tent and move up the nullah, closely followed by Heder Khan, a Yarkandi who was a sort of slave to him.

We called out, asking him where he was going, but received no answer; a second summons was also void of result. Then we ordered him to halt, and, on overtaking him, were received with a torrent of abuse, to the effect that he and the man with him

were leaving at once, that they were now near some inhabited place, and he would not stay with us a day longer, while we might go to hell!

Now Khalik had been brought with us for the express purpose of dealing with any Tibetans we might meet, and the belief was still cherished that he had great influence with these people, so we naturally refused to let him go and ordered him to return; this he flatly declined to do.

Turning from him for a moment, Heder Khan was ordered back to camp; he was on the point of obeying when he caught Khalik's eye—he loathed the bashi, but fear outweighed hatred and he waited. He did not wait long, however; a very little forcible persuasion was all that was needed to send him back a sadder and wiser man.

Khalik, nevertheless, refused to move a step back and dared us to do our worst. The Argoons, who feared him to a man and obeyed him implicitly, were now standing together, eagerly watching the scene and waiting to see the upshot; we knew that they would range themselves on the winning side. We had particular reasons for not wishing to touch Khalik, and though his manner of late had been almost unbearable, it was determined not to proceed to extremities unless absolutely necessary.

Hargreaves placed himself in front of Khalik, in order to stop his progress, and the gun was sent for; as soon as it arrived, we drew a line on the ground and then stepped back ten paces, giving Khalik the choice of walking over the line and being shot, or returning to his tent.

It was a critical moment; no one spoke a word. Kalik looked at us, and we at him. A minute passed, and then—the crisis was over, and Khalik turned,

threw down his load and strode back to his tent. The Argoons, who had looked threatening and defiant, slunk away to their cooking-pots.

An hour afterwards, the Ladaki, Soonam Sirring, whom we knew to be faithful, came to our tent and told us that he had heard these Argoons declare that, when it was dark, they would take the ponies and go. This, of course, had to be prevented, so Soonam Sirring was sent out to watch the animals and drive them close in to our tents; our guns were also placed in a handy and conspicuous position. The evening, however, passed in peace, and nothing untoward occurred during the hours of darkness.

On leaving our tent early the next morning, we were greeted by the men with many salaams and everyone was on his best behaviour. A sharp look-out was kept for some days, but from this time the conduct of the men was all that could be desired, and no further signs of discontent were seen.

CHAPTER XVII

STOPPED BY TIBETANS

THE caravan crossed a low pass, made its way through a narrow cutting, and somewhat unexpectedly entered into a rolling, grassy valley which stretched away to the west as far as the eye could reach; not a soul was in sight, and, though we examined the ground most carefully, could find no trace of human beings. By the position of the mountains, however, it was clear that we were now on the straight road to Rudok.

The surrounding country was teeming with animal life, and yaks and gazelle were seen in abundance; sand-grouse were also plentiful, far more so than on the earlier part of the journey. They were so ridiculously tame that we never once succeeded in getting a sporting shot; when approached, they just waddled on ahead, and if we ran, they fluttered a little way in front. The only thing to do when we wanted to obtain a bag was to fire at them as they sat on the ground, and even this treatment scarcely ruffled their tempers. We passed from covey to covey, taking toll from each, leaving the remainder as calm and undisturbed as when first discovered.

It was a very different matter with the goa, for I have never come across wilder animals. We saw many, but only obtained one shot, and that at a running animal; the bullet unfortunately broke the poor

beast's leg, and he managed to get clear away on the remaining three.

The whole of the next day was spent in endeavours to circumvent these gazelle. They were wilder than ever, and stalk after stalk failed; it was not until late in the afternoon that a really favourable opportunity occurred, and two gazelle were discovered lying down in a small ravine. It was a simple stalk, and I managed to approach within thirty yards without being seen. Both animals scented danger, and made ready for flight; but it was too late, and I bagged the two, being particularly pleased to find that the larger was the self-same animal I had wounded on the previous day; his leg had been smashed to pieces just above the hock, but already the wound appeared to be healing. He must have made a large circuit before reaching this spot, as he had disappeared from sight going in exactly the opposite direction.

Hargreaves proved even more successful, for besides getting a good goa, he came across two wolves, a black and a yellow, the latter of which he killed; though very plentiful in this country, it seldom happens that they allow man to approach close enough for a shot.

Yaks were constantly encountered but were never fired at, as the camp was fully supplied with meat, and the overburdened ponies were quite unable to carry away the horns.

Every valley was keenly searched for an ovis ammon. Not a single ram was found, though females and young were fairly numerous, and a few old, broken horns scattered about the ravines suggested that the rams visit these parts at some season of the year. No human beings were seen in the valley,

and our guide, who now refused to accompany us farther, accounted for this by saying that everyone had gone to Rudok to attend a festival which was being held at that place. Whatever the cause, no one appeared to bar our progress.

Once more the convoy crossed the route taken by Deasy when being escorted back by the Tibetans on his first expedition; then we made our way across a waterless plain, and along the banks of a fresh-water stream which rose suddenly in powerful volume from the arid ground.

The sacred town of Rudok now lay at no great distance ahead, a place we were exceedingly anxious to see. The ponies were therefore urged along at topmost speed, for every mile now covered, lessened the chances of our being turned back along the road we had come. A sharp look-out was kept on all the valleys running north and south, but not a soul was seen.

Presently, however, we received a shock, for, on the path we were taking, there appeared the fresh imprints of a pony's hoofs which led along the direct road to Rudok. The animal had sometimes ambled and sometimes walked; after a short distance, it had been joined by a second, and then by a third, all travelling in the same direction.

Two or three deserted fireplaces were seen and examined, and one was found to be still quite warm, having probably been used within the last twenty-four hours. The important point now arose as to whether the people, whoever they were, had seen us; if so, they had, in all probability, ridden on to give information to the authorities of our approach, and to warn the whole countryside. We determined, therefore, to make a dash for it.

We had lately been steadily descending, and were

now not more than 14,800 feet above sea-level; gazelle, birds and insects were more plentiful, but yak and antelope were no longer to be seen. Grass again began to fail, and the sparsely scattered blades were withering fast; as a result the ponies' ribs began to show in a painful manner and they wearied of their marches much more quickly than before. This was not at all encouraging, and did not hold out much chance of our winning the race upon which we had embarked; moreover, the country ahead did not seem to show any improvement upon that in which we were now travelling, but appeared to consist of rugged limestone spurs and ridges running in all directions.

Bum Tso was reached during the afternoon and the camp pitched on the western shore. The waters of this lake contained no salt or soda, but were distinctly foul and evil-smelling. No exit could be seen for the surplus water, though it is more than probable that at certain seasons of the year the lake overflows its banks. The shores are flat and composed of mud, and the stream which we had been following, and which we had been compelled to ford, empties itself into the lake.

On the shores and covering the surface of the water were countless thousands of game-birds: bar-headed geese, pintails, mallards and teal, and a few of the noisy, fish-eating brahmini duck. Owing to the entire absence of cover, a near approach was impossible, so we had to shoot with a rifle, and, by this means, managed to secure five fat geese. In the river-bed, bushes—the first seen for months—grew in tangled profusion, and afforded a home to innumerable hares, which scurried in and out at the approach of the caravan. Wild rhubarb was to be found everywhere, but its stems were tough and tasteless.

On leaving Bum Tso, a long and tiring pass, devoid of water and vegetation, was ascended; but our hopes of reaching Rudok increased, as there were no signs of human beings. Late in the afternoon three black dots were seen on the plain, which were taken to be wild yaks; close to them lay a pool of water, towards which we directed our weary footsteps. On drawing near, it was observed that the yaks kept very still: the glasses were brought to bear, and it at once became evident that they were not yaks but tents. Our presence obviously created a great sensation, for men could be seen passing hastily from tent to tent, and our later arrival was greeted with much "salaaming" and "jooing."[1]

The party consisted of three men, five women and five children, though the actual relationship could not be determined. The oldest man, acting as spokesman, was a dirty, unkempt, grey-haired creature, and spent most of his time with his tongue thrust out to its fullest extent. This was his form of greeting, and, as we had never seen it before, it took us somewhat by surprise; one gets used to most things in time, however, even to the sight of a red tongue continually protruding from a black face.

The tents were of the usual pattern, the cloth made from the hair of yaks, and fixed together in such a manner as to leave a long slit at the ridge, in order to allow of the escape of smoke from the fire inside. The space within was enlarged by the covering being pulled out here and there with ropes, generally pegged to the ground by means of antelope horns.

The old man not only informed us that he was a country gentleman, and that he spent his summers at this spot tending his flocks and herds, but also that a

[1] Joo = hail.

great gold-field, named Munak Thok, lay about eight or nine miles distant. We made up our minds to visit this place in order to get supplies for both man and beast, for on this day the last atom of the drivers' rations had disappeared—the four Kashmiris had still four days' supplies left, whilst Hargreaves and I had sufficient to last for five days. Our new friends quickly brought stacks of fuel, and, what was much more to the taste of the drivers, bowls of milk.

We were now only eight marches from Rudok, and congratulated ourselves on having got so far without meeting with any signs of hostility from the natives. The further information was obtained that a road ran south from Munak Thok to the village of Gartok, where there was a monastery, in which building the governor of the district lived.

In the evening the goats and sheep, of which there were many hundreds, were driven in; in order to prevent their straying, they were tied closely together, neck to neck, facing in opposite directions, and afterwards secured in long lines to one stout rope. If a sheep or goat wished to lie down, it had to wait until its neighbour was of the same mind or run the risk of being strangled.

A rude awakening awaited us, for at daybreak on the following morning the sound of raised and angry voices was heard without our tent; presently the tent-door was lifted and the frightened face of a Kashmiri presented itself. A shaky voice gasped out the news that twenty armed Tibetans had arrived on the scene for the purpose of putting an end to our further advance. Now, we thought, was the time for Khalik to display his talents, and he was at once told off to put into practice his miraculous and persuasive powers. In the meantime we dressed, and then went

out to see for ourselves how matters stood, Khalik informing us that the Tibetans refused to listen to what he had to say.

We were confronted by a dirty, villainous-looking crew. They were all armed to the teeth, each man carrying a long matchlock, either in his hand or slung across his back; swords were stuck through their girdles, and all carried long spears, while some had in addition bows and arrows. They greeted us with angry, scowling looks, but when informed of the facts of the case, that there was no flour, grain, *ghee*, or any other foodstuff remaining, and consequently we intended to go on, they were rather taken aback and retired to hold another consultation.

We had breakfast, loaded up the ponies and struck our camp; while this was being done, more men came dropping in from all directions, but even now they could not make up their minds what to do. Keeping well together, the drivers on the outside and the ponies in a herd in the centre, the caravan set out afresh. The Tibetans did not know how to act, or what to do to stop us; they followed in a body, half a mile in the rear, silent and sullen. Reinforcements, however, soon appeared to encourage them, men springing up as if by magic from all directions from apparently barren nullahs, until over fifty were gathered together.

Even then all might have been well, had not an old lama, dressed in dingy red clothes, arrived on the scene; he came hastening along on foot, shouting to us from a distance to stop. Naturally, this demand was not complied with. Hot and foaming with rage, he finally overtook the caravan, and attempted to seize one of the men.

The drivers carried between them two carbines, a

heavy rifle and a gun, but before leaving camp the greatest care had been taken to see that all weapons were unloaded, for we had determined that, unless the Tibetans actually fired upon us or wounded any of our men, we would not fire upon them.

The lama kept on urging his people to seize us, and now the Argoons and the Ladakis behaved well; whenever one of the Tibetans, bolder than his fellows, approached to stop our progress, he received a prod in the chest or a rap over the head with a *khud* stick. The rifles also were freely used for prodding, the muzzles being found excellent for this purpose. The Kashmiris, meanwhile, kept well in the centre, away from danger, shouting lustily.

The Tibetans became more and more daring as they perceived that we would not fire, and the scrimmage waxed hotter and hotter. Blows were given and returned with interest, and all the time the caravan continued to move slowly on.

This state of things, however, could not go on for long, and at last our opponents suddenly changed their tactics; at a command from the lama, all dropped their weapons and with one accord rushed in upon us.

Resistance on our part was soon over, for they were eighty to our twenty. We were seized by the arms and legs and firmly held. The shouting was appalling, while the ponies, unused to such clamour, lost their heads and stampeded. In their weak state, and laden as they were, the majority fell, and being too much burdened to rise, lay kicking where they were. The Tibetans, however, did not get a single rifle—we had to draw the line somewhere.

Then we adopted the plan of smiling upon our adversaries and patting them on the back—a course of treatment which surprised them exceedingly, and



OUR CAPTORS.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

caused them to release us. They held an impromptu durbar on the spot, which lasted for two hours; Khalik attended on our side, and of course was given a free hand to do what he could.

Neither side would give way an inch; we insisted upon going straight on, and the lama was determined that we should return by the way we had come. We tried bluff: if they would not allow us to proceed peacefully, we would force our way to Gartok, which was on the direct road to Lhasa. We maintained that we were strong enough to fight with the whole district if forced to do so; anyhow, we refused to go back.

At length a compromise was fixed upon, as follows: on condition that they promised to bring grain for the ponies and barley and *ghee* for ourselves, we were willing to return to our last camp, and there await the arrival of the headman of the district, provided that he came within twenty-four hours. They said that this headman would arrive almost at once, as the alarm had been passed along the valley.

Accordingly we trudged back, and pitched the tents on our old camping-ground by the pond, still escorted by a goodly number of our captors, though several had ridden away towards Munak Thok, for the purpose, so they declared, of bringing the promised grain.

After the tents were pitched, it was considered advisable to give our opponents an exhibition of our powers of marksmanship. It was as good as a play to watch the expressions of astonishment on their faces as the shots were placed each a hundred yards or so beyond the other, and as the bullets ricocheted across the sandy plain, raising small clouds of dust wherever they struck. The climax was reached when the magazine was used, for they had never heard or dreamt of such a device.

Without doubt this created a great impression on the enemy, but care was, nevertheless, taken to strengthen the guard over our ponies, and the animals were compelled to pick up what grazing they could close at hand, for had the Tibetans stolen our beasts, we should have been completely at their mercy. As night closed in, our escort increased, a steady stream of men arriving post haste, the jingling of the bells on the trappings of their ponies being heard far over the plain.

At 9 p.m. the headman arrived.

We had by this time carefully matured our plan of action; it was necessary for us to take the bull by the horns and boldly play the game of bounce. Khalik was at once sent to the headman's tent with minute instructions as to what he was to say. Here he demanded a full apology for the insults received: it was represented that we, who were peaceful travellers, had been set upon, while quietly marching along the plain, by a set of ruffians; we had not only been touched by them, but actually seized round the legs and arms; that someone must suffer for this; such disgraceful treatment was absolutely unheard of, etc. etc.

The reply came from the headman to the effect that he was extremely sorry that we had been subjected to such indignity, and he would come over himself in the morning and make an ample apology.

This sounded very promising, but it remained to be seen whether the official's deeds would be as good as his words.

CHAPTER XVIII

TURNED BACK

On inquiry it was found that the so-called country residence of the venerable old gentleman with the protruding tongue was, in reality, a watchguard placed to bar the road to Rudok from the east, and that our host had, while protesting his willingness to serve us, sent off messengers to the gold-fields to give information of our arrival.

Grave doubts were entertained as to whether the new arrival was a sufficiently important personage for us to deal with, for the Tibetans will never send a man of higher rank than is absolutely necessary for any purpose, and they are, as is well known, adepts at the art of delay. Further resistance, however, was out of the question, for we knew that these people would be perfectly willing to sacrifice their lives if called upon to do so by the lamas, and, above everything, we wanted to avoid bloodshed.

Their methods of preventing travellers from trespassing in their country are certainly effective. They make no appeal to arms—but rather to legs; if they fought, they would in all probability be defeated, and possibly annihilated; they therefore seize the caravan animals, bar the road, clasp the intruder round the waist, bare their chests and ask to be shot; whereupon the traveller is rendered utterly powerless.

We succeeded in photographing our opponents,

much against their will; the illustration hardly does justice to the extraordinary specimens of humanity collected before the camera, for cunning, bestiality and ignorance were stamped upon every face.

For this state of things the lamas are responsible; the people are entirely subject to them, and it is their aim to keep strangers out of the land, for they know that with the foreigner would enter knowledge, and a spread of learning is the last thing they desire.

It was also doubtful whether our captors would fulfil their part of the compact and bring the promised supplies on the following day, or whether, instead of grain, we might not find more armed men. On leaving the tent soon after sunrise, however, we found that the provisions had been brought in during the night; there was not a great quantity, certainly, but sufficient for our immediate wants, and enough to show that we were being fairly dealt with.

Five transport yaks, ten sheep, eighty pounds of suttoo, sixty of grain, six pounds of butter and nine packets of sugar had been collected in one place, and these were purchased, much to the relief of our drivers, but, needless to say, at an exorbitant price. After seeing these goods safely stowed away, the headman was sent for. There was barely time to tidy and arrange the tent before he arrived, followed by half a dozen of the escort.

He was met outside, and treated with marked coldness until the promised apology had been made, after which we thought it well to unbend, and asked him into the tent, where he was presented with a silk scarf; a similar gift was made to the next man in rank, but the old lama, who insisted on coming in as well, got nothing—much to his disgust.

The first half-hour was spent in arguing as to which road we should take, and in drinking tea. At the end of that time we were no nearer a solution than when we started, but the tea, and occasional glasses of liqueur brandy, were slowly having an effect on both parties; first the Tibetans would concede a point, then we did likewise, until at last a plan was fixed upon more or less satisfactory to both.

On condition that we promised not to try to reach Rudok, they agreed to let us proceed up a valley lying due north and exactly half way between the road we had intended to take and the one by which we had come; they said that this valley was impassable, but we decided to try it.

A curious and interesting piece of information was received from them during the conversation, to the effect that a British force was then at Khamba Dzong, in Eastern Tibet. This at the time we would not believe, for on setting out three months previously no rumours of the contemplated Tibet Mission had then reached us.

We determined to start at once, in order that the Tibetans might not have a chance of changing their minds. While the camp was being struck, Hargreaves and I had time to examine more carefully the outward appearance of the later comers. They were obviously of a superior class and all well mounted; many carried banners of gorgeous hues; the trappings of their ponies were very handsome, the sturdy little beasts being almost covered with brilliant saddle-cloths and strings of tinkling bells, and looking particularly effective at a distance.

With many expressions of regret on both sides, the caravan set out about midday. We were not entirely separated, however, from the Tibetans, for

the unpleasant old lama, together with three men to attend to the yaks, accompanied us.

The road led straight into the heart of the mountains, and though we travelled until it was dark we seemed to get very little nearer the head of the valley than we were when we left camp. The old lama stuck to us like a leech; his anxiety for our welfare was most touching. He declared that he would never leave us until we were safe on British territory; if any misfortune were to happen to us, he would never forgive himself. He was particularly suspicious about the plane table—for we still continued to work at our map—and closely examined it with his little beady black eyes. He knew that we were putting down mountains and rivers on it, but could make nothing of it himself; we, however, did not at all care for this close scrutiny, and distrusted him profoundly. Accordingly, the map was kept carefully concealed, and on returning to the camp after the day's work it was removed from the board and an old printed one substituted in its place.

We had been told that the bed of the valley was impassable for animal transport; but, as expected, this information proved to be false, for the road to the top of the pass was quite easy.

That night a severe misfortune occurred in the death of two of the ponies; one of them was Ram Singh's riding-pony, a handsome animal, which had many a time distinguished itself by its climbing powers.

The country into which we were now entering was of an unpromising nature; gaunt, crumbling pinnacles and cliffs rose on either side, divided by great slopes of disintegrated limestone; boulders were scattered over the barren ravines, but not a blade

of grass or a drop of water was to be seen. Our guide, however, led the caravan to a tiny pool, hidden in a side nullah—the one service for which we had to thank him—and this supplied just enough water for one drink apiece. After the ponies had partially quenched their thirst, they were given a pound of grain each, as no grass could be found.

Burhel were plentiful on the crests bordering the valleys, making it evident that grass grew somewhere close by; Hargreaves shot one, and thus relieved us of the necessity of killing any of the sheep.

From this date the scantiness of our supplies compelled us to put everyone on half rations, as we did not know when we should be able to obtain more food; this state of things is far from being agreeable, and brings home to one in a forcible manner the blessings of plenty. It was long before we were to be able to experience the feeling of satisfaction and contentment conferred by a plentiful and well-cooked dinner; fortunately, however, we were well supplied with tea and tobacco, and with these at hand even life in Tibet cannot assume a quite hopeless aspect.

One result of the cutting down of rations was that the Ladakis preferred a request that they might be given their share of the remaining food and not have it mixed with the rations of the Argoons, as they were distrustful of the result; everyone shared equally, each race of men having a correct amount allotted, whether they were Argoons, Ladakis, Kashmiris, or British.

We had to take observations for latitude every night with the theodolite, and were anxious to allay the suspicions of the old lama; the plan pursued by Captain Bower in Western China was consequently adopted, and found to succeed admirably. The

theodolite was placed in a conspicuous position outside the tent, and the lama was informed that we were about to say our prayers, and neither he nor his men were to come near or disturb us in any way while at our devotions. Observations in this manner were taken every day quite openly, and the performance was always looked upon with reverence by our escort, and, indeed, by all the Tibetans met with.

We moved on the next day, and fortunately entered a more favourable valley, where both grass and water were found, and goa could be seen grazing on the hillside.

In the evening, much to our surprise, we were joined by the headman from whom we had parted two days before; he and the two others with him had evidently ridden after us to see that we were not playing them some trick. They made themselves most agreeable, and gave us a welcome present of four pounds of butter and ten pounds of suttoo. The dzongpon also supplied much information about the country and the people, speaking freely on all subjects but the tabooed one of gold, and in particular the rich gold-field of Thok Jalung.

In the morning they all left with the exception of two, one of whom, unfortunately, was the old villain of a lama. We did all we knew to make him sick of the business: he was made to collect fuel, fetch water, and act as maid-of-all-work, but all to no purpose; we even went so far as to take his pony and load it up with our baggage, but he trudged doggedly on behind, with his little ferret eyes unceasingly fixed on us.

From the description given in his book, I gather that Dr. Sven Hedin was stopped by the same guard that turned us north; I am uncertain of the exact route followed from the point where he was

stopped, but he seems to have traversed the very valley we were about to enter, and of it writes: "I would rather cross the Desert of Gobi a dozen times than travel through Tibet once again in winter. It is impossible to form any conception of what it is like: it is a veritable *via dolorosa*."

The caravan next made a fatiguing march across a great salt basin, and no water could be found at the camping-ground. The men had a little of the precious liquid in their bottles, but the jaded animals had none whatever, as the water-bags had been carried empty in order to make their loads as light as possible.

The evening was a cheerless one for everybody, but Khalik, in particular, was especially depressed: he had, it seemed, secreted a hoard of Leh bread and sugar, and had been keeping it against hard times,—now, when he searched for it at dead of night, he made the unpleasant discovery that it had been stolen, and strongly suspected his servile henchman, Mahi Din. Needless to say, his discomfiture was complete.

Ten miles farther on we came upon a spring of fresh water, around which grew a little grass; as no one could tell when water would next be met with, it was decided to halt.

The weather continued glorious, with a cloudless sky, a light westerly breeze, and frosty nights; 20 degrees of frost or thereabouts were registered nightly, and this had a marked effect on the vegetation, for the grass was withering so fast that it was clear in another ten days nothing but shrivelled blades would be left. The early-morning dressing was rather a trial in this weather.

On the following day the tramp was continued, across beds of dried-up lakes and over endless tracts of gravel; not a blade of grass or a drop of water

was found, and digging proved to be quite useless; the ponies struggled on till dark, but all in vain. Weary, thirsty and hungry, men and ponies lay down where they were when darkness fell; to moisten the men's throats, we killed a sheep, but, as no fuel was obtainable, only the eaters of raw flesh partook of it.

At daybreak the shivering, miserable animals were driven on again; the same barren country continued—even the hardy burhel had disappeared. Suddenly, when least expected, we came upon a tiny stream which rose close to our feet; it vanished into the ground again after running a course of twenty yards, but a little grass grew along the banks, so, for the present, our wants were satisfied.

We were far from being relieved of all anxiety, however, for the country ahead appeared to be of similar geographical formation; the valley was hemmed in to the north and south by gaunt, precipitous cliffs that not even a wild animal could scale. Not a sound broke the stillness, not a bird or an animal moved. The ponies were now little better than skeletons, and our hopes of bringing them safely back to civilisation grew fainter and fainter.

The old lama still declared that he knew the road, but it seemed as if he were deliberately leading us to destruction, for all his reports as to water and grass proved to be false, and now he tried to persuade us to turn up one of the ravines to the north, at the head of which we knew were glaciers and an almost endless snow-field.

One more pony succumbed, but the caravan tramped steadily on, until late in the evening we came in sight of the lake, Tai Tso.

CHAPTER XIX

THE END OF THE EXPEDITION

We did not go down to the shores of Tai Tso at once, as the guides said the waters were undrinkable, and certainly there was every appearance of this being the case, as the surrounding ground was quite white and looked as if it consisted of piles of salt. Soon after pitching our camp in a waterless ravine we noticed that the lama and the yak-man were missing, and one of the drivers informed us that he had seen them strolling off in the direction of the lake, taking their bedding with them. At first we thought they had deserted us, but the glasses soon showed them seated close to the shores of the lake, engaged in cooking. Clouds of geese and duck were also circling above—and then we knew that the waters were fresh.

Tai Tso consists of a number of ponds, some of which are fresh, surrounded by a white sheet of clay and sand; this latter is composed almost entirely of ammonites and the shells of fresh-water molluscs. On the surface of the water and on the shores were countless thousands of geese and duck, busily engaged in feeding on the shrimps and weeds; coarse grass grew plentifully in the hollows between the sand-dunes.

A delightful afternoon was spent at this pleasant spot, the ponies revelling in the grass, the men engaged in patching clothes, etc., while Hargreaves and I had some excellent shooting. We met with

most success in the evening, when the birds were taking flight, and brought to bag many a fine goose halting here preparatory to its journey to the plains of India. The best performance was accomplished by Hargreaves, who brought down two bar-headed geese with one round of No. 6 shot.

It was with many misgivings that we left Tai Tso, and soon found our gloomiest forebodings fully justified: no grass was to be seen, and another dreadful day passed without food or water—the ponies dragging themselves wearily along, until darkness put an end to further travel.

On the following morning, however, the first rays of the sun showed us a considerable river only a mile farther on, and we speedily transferred our camp to its grassy banks, once more forgetting all discomforts, and spending three days happily enough.

The stream grew rapidly in size as it flowed through this valley, being continually fed by springs which rose in all directions from out of the plain. Weeds grew rankly in the water and fish were abundant, while on the banks were patches of scrub swarming with hares; I put up no less than thirty-two of these creatures from one lot of bushes alone.

We dawdled along the grassy banks, thoroughly enjoying ourselves, for the delight of seeing running water and green grass was too great to be quickly dispensed with; the jaded animals appreciated these joys to the full, and wallowed up to their bellies in the swamps. The weather, moreover, continued to be glorious, the days were warm and bright, not a cloud was to be seen in the sky, not a breath of wind troubled us. Winter was nevertheless approaching, and the cold nights warned us against delay. Kiang were plentiful in the plain, and wolves made night



A Tibetan Nomad's Tent.



Camp on the Kheo River.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

hideous with their howls. Many deserted sheep-pens dotted about the valley showed that it was a popular place for shepherds during some months of the year.

On the third day after reaching this pleasant spot, while Ram Singh was plane-tabling from a high mountain to the south and Hargreaves was on the look-out for game, I suddenly came upon an old man moving amongst the bushes. He declared that he was searching for a strayed pony, but as we were not far distant from the village of Noh, and were anxious to visit that place, we deemed it wise to prevent him carrying news of our advance, and consequently induced him to stay with us, first by means of food and kindness, and as these methods were only partially effectual, he was politely informed that he must make himself at home and remain with us for the time being. Great scorn was expressed by Khalik at the idea that the man had been watching us, but he received rather a shock that same afternoon, when two heads were seen peering at us over a ridge. There was now obviously nothing to be gained by keeping our prisoner any longer, so we let him go, and he hurriedly departed.

On advancing next day, we came across a small camp of Tibetans, who were living in three tents of the usual pattern but of a rather larger size, whilst herds of yak, sheep and goats, evidently belonging to them, were dotted over the plain. A few yaks were hired for our baggage, and we were very glad to be able to do so, as two more of our ponies succumbed from exhaustion.

Now that our presence in the neighbourhood was well known, we thought it best to alter our tactics and take the bull by the horns; two letters were accordingly written that evening, one to the headman of Noh village and the other to the dzongpon of Rudok, stating that we were peaceful travellers, who only

desired transport and supplies. The epistles were despatched by the old lama, to whom we returned the pony in order that he might travel more quickly.

On the following day we rose before it was light, and as the temperature was below zero, pushed rapidly forward to keep ourselves warm, and were still travelling fast at the thirteenth mile, when the jingling of ponies' bells was heard: whereupon the two Kashmiris burst into tears—the idea of being turned back once more being too much for their feelings.

Nearer and nearer came the sounds, and it was evident that a fairly large troop of Tibetans was riding in hot haste towards us; presently they appeared round the corner—eight in number—and mounted on beautiful little ponies almost smothered in strings of bells and gaudy trappings; very different from our poor starving beasts.

Only three of the new-comers carried guns, so their intentions were apparently peaceable. On seeing us, they dismounted, sat down, and waited our approach, and neither rose nor salaamed as we came near. The chief man or *pomba* was a coarse, brutal-looking person, with a most repulsive face, round and flabby, the forehead low, the nose flat, and an enormous mouth with the front teeth lacking; his deeply pigmented eyeballs were set in narrow slits, and altogether he was not a pleasant sight. We were afterwards told that he was a noted swashbuckler, and, on account of his bullying manner, had been told off by the villagers to settle us; it was said that the clothes, earrings and rings he wore had been borrowed expressly for the occasion.

He remained seated on a rock as we came up, and, to show how much at ease he was, proceeded to light his pipe and puff a cloud of smoke into the air; without

speaking, he motioned to us to sit on the ground in front of him—a request with which, naturally, we did not comply.

Peace reigned, however, until the great Khalik, our supposed intermediary and peacemaker, arrived upon the scene and proceeded to converse with this gentleman. It was obviously a case of "Greek meeting Greek." In less than a minute hot words were being exchanged. Suddenly Khalik seized a rifle from one of our drivers, loaded it and raised it to his shoulder; but before he could fire, Hargreaves caught hold of him and threw him to the ground.

At once all was confusion and turmoil; the Tibetans rushed at the prostrate figure of the caravan-bashi, but were kept back by our men, who had by this time all arrived on the scene. Fortunately no weapons were drawn and peace was once more established, mainly through the efforts of Soonam Sirring, who worked wonders. The Tibetans, however, never forgave Khalik, and several times afterwards asked us to hand him over to them.

Both parties encamped on the banks of the river within a short distance of each other, and, as soon as our tent was ready, a pow-wow was held. We were quite determined that nothing whatever should turn us back this time, and, after much wrangling, permission was given to continue our journey. They asked us, however, not to enter the village of Noh, as some of our drivers had eaten kiang flesh: why they objected to the eating of this animal was never ascertained.

The next process was to bargain with them respecting supplies. We were in the unfortunate position of being obliged to buy, as our men had lately been subsisting on flesh only, so that they started with a decided advantage. The price of barley was fixed at

Rs. 8 a maund (or four times as much as it was sold at ten marches farther on); they asked 1 rupee a march for baggage animals, but we flatly declined to pay this price, preferring to struggle on as best we could, making short marches.

When the bargaining was over, our unwelcome guests departed; only two of them had been allowed to enter our tent, the afore-mentioned bully and a respectable old man whose face was wreathed in a perpetual smile, and who seemed anxious to help us along.

On the following day the caravan continued its march down the banks of the river unmolested, and to the great joy of all finally reached and halted amongst a regular jungle of trees. They were certainly not very large, growing about ten or fifteen feet above the ground, nevertheless they were trees and the first we had seen since leaving Tankse, four months before. That evening great wood-fires crackled cheerfully in camp, and both animals and men thoroughly enjoyed the artificial warmth.

One pony, despite his utmost efforts, was unable to reach the tents, and died on the road. We were particularly sorry for this, as he had done excellent work, and had he lasted one march more, would have been left at Noh to recuperate after his thousand-mile tramp in Tibet.

All the rations, with the exception of meat and tea, gave out that night, but many trout were caught in the river, and partially supplied the deficiency. After the evening meal, two men arrived from Noh village, having ridden out to see why we had not reached that place.

We struck camp at daybreak, and unexpectedly came upon Noh, almost before its inhabitants were

astir; the alarm was soon given, however, and men flocked out to prevent our entrance.

Noh is built on both banks of the Kheo River, and consists of about eighty houses, similar in style to those found in Ladak and Southern Tibet. A few fields of barley are scattered along the riverside, but the total amount of cultivated land is hardly sufficient for the wants of the inhabitants. Two temples were also visible, both in an excellent state of repair.

This village was passed by, and, three miles farther on, the camp was pitched on the banks of the Kheo River. To the west, and surrounded on all sides by extensive plains, lay Tso Nyak, the most southerly of the great string of lakes known as Tso Mo Gnalari. Across this sheet of water, lying behind a rocky spur, was the monastery and village of Rudok, a place as jealously guarded as the sacred city of Lhasa.

Soon after settling down, we received a visit from the Rudok officials; there was no personage of much importance amongst them, but they had all been sent by the dzongpon of Rudok with orders to supply us with transport and food. The people readily agreed to let us have baggage animals on hire at a reasonable rate; but such was not the case with regard to food, as they not only asked exorbitant prices, but produced false weights and measures. We felt that the bartering for food could be safely left to the men, as it affected them more than ourselves, and I have little doubt that they were quite equal to the occasion; flour, butter, goats, salt and tobacco were purchased, but no grain for the ponies could be obtained. They were difficult people to deal with, as they were always shifting their ground and breaking their promises. They agreed, for instance, to let us have eight ponies, and then produced only five; when we insisted on having the full

number, they took away the five animals, promising to bring them again in the morning together with three yaks—then they finally appeared with eight yaks!

For the last time observations were taken with the theodolite; quite a small crowd of people watched the proceedings, but no one seemed to object in the least. They were immensely taken with our camera and most anxious to have their photographs taken, roaring with laughter on seeing their friends' faces in the view-finder.

On the following day we set out once more, with the eight hired yaks, and accompanied for the first march by a party of villagers. The track skirted the shores of Tso Nyak and two smaller lakes, over the softest grass, broken at intervals by patches of sand. The waters of the lakes were as still as glass, and myriads of shrimps and trout fry were seen amongst the weeds, while on the surface and along the shores wild duck abounded. The natives declared that Tso Nyak contained trout of immense size, and I see no reason to doubt this statement, as the water is fresh and food plentiful.

Tso Mo Gnalari consists of a string of five lakes, 120 miles in length, and of an average width of 4 miles. All are fresh, with the exception of Pangong, the most northerly, and connected by narrow, deep channels with muddy, weedy beds, along which the water moves at the rate of one mile an hour. It is said that for four months of the year these lakes (including the salt Pangong) are entirely frozen over, and to a sufficient depth to allow a laden caravan to traverse them from end to end; in this manner Dr. Sven Hedin returned to Ladak.

At Pal we parted from our escort and struck into the mountains again, for the path skirting the lake was



A Soldier of Rudok.



SERVANT. SOLDIER. MERCHANT. PONYMAN.

Men of Rudok sent to assist us.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

no longer passable. Our old friend the lama had disappeared at Noh, but two others of the same kind had taken his place; they paid no attention to our movements, but with bland, innocent smiles on their faces kept wandering among our baggage, picking up unconsidered trifles, which found a resting-place in their baggy garments. Now, rich with pilfered goods, they came to bid farewell. The last to go was the merchant, who had done very well out of us; he brought a present of flour and rice, but asked for "a chit," or letter of recommendation, and when questioned as to what possible use it would be to him, naïvely replied, "One never knows."

.

Little more need be said, for the route followed from here has been traversed and described before. Seven monotonous marches along barren nullahs and over stony passes brought us over the Marsi mik La into our old camp at Chorkangma.

As the hired yaks from Noh were found sufficient to carry the whole of our now reduced baggage, the ponies were relieved of everything except their blankets, and, in this manner, completed their marches without any trouble.

It was, however, with the greatest difficulty that my original riding-pony was urged along; but he was such a charming little fellow, and had served us so well, that I was determined to save him. Every day he was started off before the other animals, with two tiny bags of grain on his back; from these he had a small feed every hour, and by this means just managed to keep going. He finally reached Tankse safely, and was there given to Soonam Tilney.

The evening at bleak Chorkangma was a pleasant one; we were safely back on British territory, and the

welcome mail arrived as promised, carried in three sacks—two on a pony and one on the back of a coolie. We sat up late that night reading our letters and skimming through the news—a never-to-be-forgotten pleasure, in which so much is compressed in so short a time. For us, this was a truly memorable camp, being our hundreth halting-ground since entering Tibet, during which time we had completed a round of 1000 miles over the frontier.

On the following day we moved to Phobrang, and were welcomed by the dirty inhabitants; these were the people who had deserted us, but we had lately learnt of Khalik's villainy from the Argoon drivers, who had at last thrown off the yoke of their bullying overseer. The faces of the men at Phobrang were wreathed in smiles, but this was possibly due to nervousness as to how we should deal with them after their desertion; knowing, however, how badly they had been treated by Khalik and how he had deceived them, we naturally did nothing.

Then on to Tankse, where again we received a warm welcome, the people turning out in force to meet us, bringing fresh trout, apricots, turnips, milk, etc., as presents. We were once more back in civilisation and amongst friends.

The first day was spent in recounting adventures, and we found that during September a report had been current to the effect that the whole expedition had been annihilated by the Tibetans; one family so far believed it as to go into mourning for its breadwinner.

The second day we settled up all accounts for grain and hire of animals, and paid the Tankse drivers; our own ponies, now reduced to fifteen were either given away to the Ladakis or sold for a nominal sum. Presents and a little extra pay were given to all the

men, for they had stood by us loyally through many trials: we were sincerely sorry to part with the greater number of them, and they openly showed their regret at leaving our service. A few days later they all came to Leh to bid us good-bye.

With new transport and the last and fittest of our ponies Leh was quickly reached. We spent a pleasant two days here, cordially welcomed by the missionaries, and then set out for Srinagar, where we arrived on the 2nd of November.

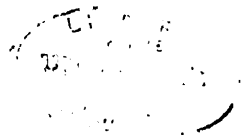
Khalik was left in jail, where he was placed by the British Joint Commissioner, to await his trial for extortion and ill-treatment of the natives. At Nurla the faithful Soonam Sirring and his brother left us—taking with them the best and only remaining pony. Sub-surveyor Ram Singh carried the maps himself to Dehra Dun, where we soon afterwards heard that he had been made a Rai Sahib as a reward for the good work done.

In the Sind Valley Hargreaves hurried on ahead to catch his steamer for England, to enjoy a little well-earned leave before joining the Depôt. I returned to Peshawar, little thinking that within two months I should again be in Tibet, attached to Colonel Younghusband's Mission, and with other journeys in front of me.

Though at the beginning of the expedition fortune had seemed to be against us, yet, owing to the plucky way in which our followers had worked and their doggedness in overcoming apparently insuperable obstacles, the expedition had been a complete success. It resulted in the correct mapping of 35,000 square miles of hitherto unknown and unexplored country.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA





PART II

THE GARTOK EXPEDITION
1904-1905



ONE OF THE FIVE GOLDEN TOMBS AT TASHI LHUMPO.

PART II

THE GARTOK EXPEDITION 1904-1905

CHAPTER I

EVENTS OF THE PRECEDING YEAR

THE Tibetans having for many years neglected to observe the Treaty signed at Darjeeling in 1890, it became necessary to take some notice of their vagaries. Accordingly, a Mission was despatched in 1903 to Khamba Dzong, a place within the Tibetan border, but agreed to by the Chinese as a suitable spot for the discussion of frontier matters. The Tibetans themselves, however, would have none of it. They sent a few inferior local officials to meet and obstruct the Mission, but no one of sufficient importance and rank to seriously discuss the situation.

Months passed by, and winter was approaching. Every opportunity had been given to the Tibetans to bring matters to an amicable conclusion, but without avail. Unwillingly, therefore, an advance was determined upon, the Mission escort strengthened, and the Chumbi Valley occupied. The Mission, with a suitable escort, was deposited at Tuna, where three weary months of cold, wind, and privation were passed, in order that

the Tibetans might have yet one more chance of a peaceable settlement. In April, the Tibetan Government refusing to even discuss matters, a further advance was ordered, and after two fights, disastrous to the Tibetans, Gyantse was occupied.

Again was the Mission left to try and persuade the Tibetans of the seriousness of the attitude which they persisted in maintaining. Any chance of a peaceable conclusion was, however, abruptly brought to an end by a sudden attack three weeks later on the houses occupied by the Mission. The assault was easily repulsed, but the troops at the disposal of Colonel Younghusband were not strong enough to attack and occupy the fort of Gyantse, which consequently remained in possession of the Tibetans, dominating the British position for nearly two months. Several short but tough fights occurred in the neighbourhood, the Tibetans surprising everybody by their courage and the range of their weapons.

A strong force was then organised in the Chumbi Valley, and early in July, Gyantse Dzong was captured, and an advance on Lhasa ordered. To this the Tibetans offered scarcely any resistance, although Nature, with continuous rain and lofty passes, rendered them every assistance. The crossing of the Brahmaputra was successfully accomplished, and Lhasa reached by the 3rd August. At first the prospects of a Treaty being signed in the short time at the disposal of Colonel Younghusband, the British Commissioner, were very small, as it had been decided that the Mission could not winter at Lhasa. By dint of patience and persuasion, however, the apparently impossible was accomplished, and the Treaty between Great Britain and Tibet was formally signed at the Pota-la, the residence of the fugitive Delai Lama, on the 5th September 1904.

CHAPTER II

PREPARATIONS AT GYANTSE

In the meantime, enterprising spirits in the force had been planning journeys to increase our geographical knowledge of the country. To these trips the Tibetans offered no objections, but for various reasons two out of the three were abandoned, to the disappointment of all interested in geography. The exploration of that part of the Brahmaputra which lay east of Lhasa, through the Abor country, to Assam, and Mr. Wilton's projected trip from Lhasa to China, were given up, and the journey which is described in this book alone remained.

In Article 5 of the Treaty it had been agreed that trade marts should be opened at Gyantse, Yatung, and Gartok. The two former places were situated along the line of advance to Lhasa, and were already well known, but of Gartok our knowledge was limited in the extreme. No European had ever visited the place, and although its position had been fairly accurately determined by the famous explorer, Pundit Nain Singh, and his companions, their description left much to the imagination. It therefore became a matter of importance that before finally settling on the spot as a trade mart, all possible information should be obtained as to its possibilities and suitability to trade requirements, and that the routes to and from the various passes on our frontier should be properly surveyed, so that future

proposals for opening other marts should be based on accurate information. The Government of India was also eager to seize this unique opportunity of increasing the geographical knowledge of the little-known country beyond the Himalayas.

A strong band of surveyors under Captain C. H. D. Ryder, R.E., accompanied the expedition. Captain Ryder had had much previous experience of trans-frontier surveying, having made two exploring expeditions in Western China and Eastern Tibet, served with the China Field Force, and had just been in charge of the survey party with the expedition to Lhasa, probably the most important survey work that has been completed across the Indian frontier for many years. He was on this occasion assisted by Captain H. Wood, R.E., whose services were peculiarly useful on account of his recent trip to Nepal, when he saw and observed so many of the great Himalayan snow peaks which were afterwards recognised by him on this expedition. Lieutenant F. Bailey, 32nd Pioneers, who had served with the Mounted Infantry in the Tibet Mission—one of the few officers who had taken the trouble to study Tibetan—accompanied the party as Interpreter and as my Assistant.

We were fortunate enough to obtain the services of my old companion, Ram Singh, who had already done excellent work and won credit to himself, not only with me, but with Captain Deasy and Dr. Stein. Three native soldier surveyors were also attached to the party, one of whom, however, owing to ill health, had to be sent back to Gyantse shortly after the party started. The medical work was entrusted to Hospital Assistant Hira Singh, who had been with the Tibet Frontier Commission since its inception. His work included not only the medical care of the officers and

men of the party, but also of the Tibetans, who on every possible occasion flocked in to receive medical treatment at his hands. There were one or two marked differences between this and former exploring expeditions in Tibet: the latter had been got ready after months of thought and preparation, but on this occasion only a few days were available. Captain Wood and Lieutenant Bailey arrived at Gyantse on 30th September, Captain Ryder on the 5th, and myself on 6th October, the party starting on the 10th. During these few days the whole work of equipping and organising had to be completed.

For the first time in the history of the country, British officers, with only a nominal escort, were going to traverse Tibet with the cognisance and assistance of the Tibetans themselves; but fighting had only recently ceased, and the ink was scarcely dry on the Treaty. It was impossible to foretell to what extent and in what spirit the Tibetans meant to observe their obligations. This expedition, therefore, in addition to its geographical and political objects, was somewhat of a *ballon d'essai* as to whether the Tibetans would seize this, their first opportunity, of observing the Treaty, in spirit as well as in letter, a somewhat important point as marking—what all hoped would be the case—a turning-point in the relations between Great Britain and Tibet.

It being, however, doubtful to what extent the assistance of the Tibetans might be relied on, it was important that in transport and supplies we should be to some extent independent. Our only information regarding the route to be traversed was to be obtained from the somewhat meagre report, compiled by Captain Montgomery, of a journey which had been undertaken forty years previously by Pundit Nain Singh. The

Lhasa Government had, however, deputed an official, Ka Sang, lately a clerk in that city, to accompany us, and had also sent a written permit (a copy of which is here given) signed with the seals of all the important authorities in Lhasa. The translation is worthy of careful perusal, as showing the amount of trust the highest authorities put in the honesty of their subordinates.

"All dzongpons, peasants, headmen, and others at the following places, Gyantse, Shigatse, Lhatse, Sang Sang Raka, Sa-ka, Tra-dom, Truksum, Tok-chen, Barkha, Pu-rang, Misar, Nik-yu, and Gartok, pay attention to this. The English, having come to Lhasa, to settle a matter between England and Tibet, have made a Treaty of peace agreeable to both parties, and in accordance with the terms of the Treaty a trade mart is to be established at Gartok. Some English sahibs and a few attendants are proceeding to see what the place is like, and we have sent an official to accompany them. We will send an order later on to explain the terms of the Treaty, meanwhile the official must explain the matter carefully to all, and the dzongpons or their substitutes must accompany the sahibs as far as the limits of their own districts. All landowners, monastic estates, etc., must provide transport, grass, fuel, etc., and will receive the correct price in accordance with the custom of the country, and must not raise any disturbance or quarrels. Each district must report to the Government the facts regarding the passage of the sahibs, and the officials must not requisition supplies from the villagers on pretence that it is for the sahibs.

"From the National Assembly.

"*Dragon Year*, 13*th day of the* 8*th month*."
(22*nd September*, 1904.)

Seals of Dre-pung Monastery.
„ Ser-ra „
„ Ga-den „
„ General Seal.

Two months' supplies were taken for the sepoys and followers, and additional supplies for two months of those articles of diet, such as *ghi* and *goor*,[1] which

[1] Clarified butter and coarse sugar.

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

PERMIT GIVEN BY THE LHASA GOVERNMENT.

could not be obtained locally. About three months' supplies were taken for the officers, meat being the only article of food which it was not necessary to convey with us, as sheep were known to be plentiful, and game, it was hoped, would provide a welcome change of diet for everyone.

A third important point, which in our preparations and throughout the expedition controlled our plans and movements, was that, starting as we did at the commencement of winter, it was obvious that we should have a race against time, and somewhat of a long race too, for over 800 miles and several high passes had to be traversed before we should reach British territory. Should it snow heavily, the contingency that we might have to winter in the uplands of Tibet had to be taken into consideration, a not very pleasant prospect to those of us who had already experienced the vicissitudes of a Tibetan winter at Tuna. During our journey we utilised at different times for transport purposes ponies, donkeys, mules, yaks, and coolies, the majority of the ponies and mules accompanying us from start to finish. We left Gyantse with 43 ponies, 17 of which were for riding purposes, and 100 yaks; these latter we were to use only as far as Shigatse, as they were lent to us from one of the yak corps organised for the Tibet Expedition. From Shigatse onwards, we should have to replace them with what transport the Tibetans might provide. As drivers for our 26 baggage animals, we had to enlist anyone we could pick up, and a mixed lot they were. To a nucleus of three Punjabis who had served with one of the Ekka corps, were added a Chinaman, Tibetans, some Sikkim men, and a few Nepalese, all of whom worked well throughout. As personal orderlies, and

as a nominal guard, we were given five men of 8th Gurkhas, who had served with the Mounted Infantry, and although they did not encounter that class of difficulty which a Gurkha most loves, namely fighting, they proved themselves a most valuable addition to the party. From such a regiment we expected and obtained good trusty men. The party was completed by the addition of two servants, five survey assistants, and Mahomed Esa, a Ladaki, and an old companion of Colonel Sir F. Younghusband's in previous travels. This man was appointed to act as caravan-bashi. Every man had volunteered to come, and all I am glad to say survived the journey, and returned home safe and sound. The greatest care was taken that each man should be well clothed, and although little was to be obtained at Gyantse in the way of furs, we were told that Shigatse would provide everything needed in that line.

CHAPTER III

ON THE ROAD TO SHIGATSE

As our preparations progressed, the camp which had been pitched in a field close to the Mission House at Gyantse rapidly grew in size. Here the saddles, grain, tents, and foodstuffs were collected, sorted, and distributed, or packed into convenient loads, everything being completed by the evening of October 9th. On the following morning we set out, accompanied as far as Shigatse by Captain O'Connor, C.I.E., British Trade Agent at Gyantse; Captain Stein, I.M.S., the Medical Officer in charge at the place; and by Mr. Magniac, lately Private Secretary to Colonel Younghusband. The force as it set out was consequently of no mean size, and presented a decidedly imposing appearance.

Gyantse and its ruins were soon left behind, though the remains of the great fortress, situated on its precipitous rocky base, remained in sight the whole day. At noon we approached Dongtse, once the headquarters of the southern Tibet Army. This interesting spot had been visited by a strong column detached from Gyantse soon after the fall of that fort. The surrounding walls, behind which the once truculent but faint-hearted Tibetans had determined to fight, still showed the countless and well-made loopholes. Externally the place was just as it had been prepared three months previously, but now all

was peace, and, instead of being received with showers of bullets and cries of derision, a peaceful band of villagers with headmen and lamas to the fore came out to welcome us. A large walled-in garden had been prepared as a camping-ground, and here in the shade of a forest of trees the tents were pitched. Though evidences of the recent occupation of the village by the invaders were noticeable everywhere, yet the inhabitants had apparently returned in full force to their homes, and showed nothing but curiosity, mixed with respect, for the foreigners who were now freely allowed into the country for the first time.

It was here that Sarat Chandra Das, the well-known native explorer, spent several weeks in 1879, as the honoured guest of the head abbot of the gompa. For this hospitality the old and greatly respected priest paid with his life, for he was haled to Lhasa by the orders of the Government, tried, and sentenced to death. The tenets of the Great Buddha prohibit the spilling of blood, and in order to avoid the wrath of the god, the grey-headed abbot was sewn up in a leather bag and cast into the Brahmaputra. This was not, however, sufficient to allay the anger of the Lhasa Government and of the fanatical priesthood, for they set to work to wipe out the family, root and branch, slaying some and sending others into slavery. The various relations were treated in a similar manner, and after the complete extermination of the whole family the vengeance of the priests was appeased.

The caravan-men had already more or less fallen into their work and knew what was expected of them, so the following morning saw us clear of Dongtse before the sun had struck our wooded camping-ground. The road ran along the south-west side

of the valley, passing between well-cultivated and irrigated fields and through prosperous villages. The crops had all been cut, a fact which detracted from the beauty of the valley, but not from its interest; for the people were hard at work, threshing out the grain and collecting the straw into the granaries. As we approached, men and children would leave their work and run to the road to see the strangers, begging for alms or talking to the drivers. Looking at the peaceful scene, one could scarcely imagine that but two months previously these people had listened in their homes to the booming of the guns which were pounding away at Gyantse fort. Picturesque monasteries and nunneries, surrounded by trees, lay high up the neighbouring valleys, their whitewashed walls showing up clear and distinct against the brown background of rock.

That night we halted at the village of Nurbu Chungse, a large straggling collection of mud-brick buildings, and on the following day reached Jorgya. Here a pleasant surprise was in store for us, for our tents were pitched on a delightful lawn, large enough to hold two full-sized tennis courts, and covered with beautiful soft rich grass. Well-grown and closely planted trees surrounded the open space, while, outside again, a high wall shut off the place from the prying eyes of passers-by. Attached to the garden was the house, a large two-storeyed building which had been designed with an eye to comfort, the interior yard being full of geraniums and many other kinds of flowers to be found in England. The proprietor was an immense man, tall, broad, and stout, one of the few big men to be found in Tibet, whose open face beamed with pleasure as he bustled round, followed by his servants, in eager anticipation of our wants.



Entrance Gate of Shalu Monastery.



Fortified Wall across the Road near Pin-dzo-ling.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

However backward the Tibetans may be in civilisation, they have a very good idea of making themselves comfortable and enjoying the scanty gifts which Providence has given to their country. Chinese habits and customs are almost universal, as the Tibetan himself is apparently not of an inventive turn of mind; for the internal decorations are all done by Chinese, their vases come from China, and the better class of clothes are brought from that country; yet, with all this, his house is always comfortable and homely, and his lawn, garden, and trees beautifully kept, forming an ideal spot for tea-parties—a recreation and amusement of which the Tibetans are excessively fond.

On the road, we passed the great fort of Pen-nang, perched upon a solitary rock rising from the centre of the plain. The buildings are substantially made and in good condition. The strength of the fortress almost equals that of Gyantse Dzong, but it had surrendered to General Macdonald after the fall of Gyantse, without a single shot being fired in its defence. From Jorgya onwards the valley widens considerably, the Nyang Chu River meandering by many channels across the plain, with numerous intervening islands covered with scrub jungle teeming with hares and partridges. This day, however, could not be devoted to sport, for Captain O'Connor had been asked to visit the monastery of Shalu, which lies a few miles up a valley to the west of the Shigatse road. As our march was to be a long one, we set out early, and with an advance guard of scallywag Tibetans mounted on diminutive ponies, and followed by our escort of Mounted Infantry, we cantered the greater part of the way.

On crossing a spur four miles from Jorgya, the

first view of Shigatse, the commercial centre and the second largest town in Tibet, was obtained. Though still at a great distance from us, the closely packed lamasery of Tashi Lhumpo with its golden tombs, the immense fort of Shigatse, and the snow-white walls of the houses showed up brilliantly against the dark background of rock.

We had but little time to waste, and were soon clattering on again, in and out of fields and over irrigation canals, until the lamasery of Shalu, almost hidden in a forest of trees, was reached. Every coign of vantage along the approach was occupied by monks and boys, old and young, clean and dirty, all dressed in the usual rough dark-red cloaks.

Leaving the ponies outside, we entered a large courtyard and passed into the house, through a fine doorway of Chinese design. The head lama of Shalu here received us, and ushered us into a lofty and handsomely decorated room, one side of which consisted almost entirely of windows. The centre of the room was given up to couches and cushions, and the atmosphere was laden with the scent of incense and flowers. Hardly had we seated ourselves, when refreshments were brought in, in such profusion as to overflow all the available tables. Much as we wished to avail ourselves of our host's hospitality, it was a decided trial to eat some of the dishes, and we were not yet accustomed to the horrible decoction which the Tibetans offered us as tea. When giving or receiving hospitality in Tibet, there is always some hitch in the proceedings; for Europeans cannot get to like their various dishes, whilst the Tibetans show an equal dislike for ours. Our scruples had, however, to be set aside, and the dishes demanded that they should at least be tasted.

The more solid foods were the least objectionable, as we were only intended to partake of minute samples. The tea, however, opened up an entirely different question; for any mistake might grievously insult the host, since etiquette demands that the cup must not be finished at one drink, for such an action would show great greediness. On the other hand, you must not drink too little, for this is tantamount to saying that you do not like his brew. Again, it is no good pretending you like it, by only drinking half the cup, for as soon as you set it down again, it is at once filled afresh by an ever ready servant.

The custom of using both hands when offering or receiving anything probably originated in the barbaric ages, when the presentation of a gift with one hand only allowed the other free to drive a dagger home.

Perhaps the funniest of all Tibetan customs is that known as the "salaamy sheep," which, together with a "scarf of greeting," is presented to the guest on arrival. The animal, after being killed, skinned, and cleaned, has the hind legs passed through the muscles of the fore legs, and is then hung up to dry, and to partly decompose. After poisoning the surrounding air for several months, the flesh is considered ripe for eating, and is in this condition ready for presentation to the guest. On being brought in, it is placed on the ground in a sitting position, immediately in front of the recipient, to whom the carcase appears to bow. The gift of the "salaamy sheep" to our party was always very popular amongst the Tibetans, for it was promptly returned to the servants of the donor, and formed the occasion for much feasting and rejoicing.

At this, our first feast, we did our duty manfully, and retired after eating and drinking more than we required. We looked at old stereoscopic pictures which

depicted ladies in crinolines, ancient locomotives, one of the early Paris Exhibitions (the last thing one would expect to find in Tibet), and were then shown over the building. The monastery had but just recently been renovated and decorated, the rooms were large and airy, and though the paintings were brilliant, the colours did not clash with one another. Full-blown lamas, budding lamas, boys, and attendants swarmed in the building, appearing in crowds from every passage and opening, all dressed in the usual dingy red, the only difference of shade being due to the age and dirt of the garments. The same remark would apply to the condition of their faces and arms. Their bodies were always thickly covered with grease and fat, but the more exposed parts suggested strongly that the lamas had recently completed the sweeping of a chimney or the cleaning out of a stoke-hole.

But time was passing, so bidding farewell to our grinning clerical friends, we set out afresh. The little Tibetan ponies, mostly from 11 to 12 hands high, thoroughly enjoyed the scamper along level paths, over stretches of grass and across water channels, and at this rate we rapidly approached Shigatse, where we were to camp. However, we were not to get there as soon as expected, for two miles from the town deputations of lamas and laymen met us, and after presenting Captain O'Connor with silk scarves, begged us to dismount and partake of more refreshments. There was no help for it; we had to get down again, and on entering two tents, which had been pitched close to the road, were compelled to drink more tea and eat more cakes, most of which, I must own, were at any rate quite nice to look at.

Once more mounted, we approached Shigatse at a more decorous pace. The house of the chief noble and



FROM SHIGATSE FORT LOOKING NORTH.



PART OF SHIGATSE, LOOKING EAST FROM THE FORT.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

the gardens surrounding it had been assigned to us, and here the baggage animals had already assembled and been unladen, the tents pitched, and everything put in order. Great crowds filled the road and peered over every wall and from every window, staring with open mouths at the harmless strangers whom they had been taught to believe were devils. It must be remembered that but very few of these people had ever seen a European before. The crowd almost blocked the road, but a way was made by the usual noisy and important policemen, who, carrying heavy whips, struck wildly to the right and left, taking care, however, that the lash should only fall on the smallest children, and preferably on the naked ones.

CHAPTER IV

INTERVIEW WITH THE TASHI LAMA

HARDLY had we entered the compound when representatives of the Tashi Lama, the fort, and the town appeared, bringing in maunds and maunds of grain, suttoo and flour, and bales of ghi, butter and sugar, and of course the "salaamy sheep." These were placed in rows in front of the tents, and even in the tents themselves. The crush of animals, baggage, servants, soldiers, officials, loafers, and beggars was simply appalling, but after a few words had been exchanged and the officials dismissed, the very officious but for once useful policemen cleared the compound and drove the intruders out of the one and only door. We all dined that night in a handsome room in the upper storey of the house, and afterwards watched the fine illuminations of the Tashi Lhumpo. The mass of buildings was lit up from end to end by countless little lamps, this day being the anniversary of the death of the first Tashi Lama. Our arrival coinciding with this event was looked upon by the superstitious Tibetans as a good omen.

Early the following morning we strolled into the bazaar to see if we could purchase in the open market any of the many things required. This was only accomplished with the greatest difficulty, for the place was densely packed, and as the people crowded round, it was only with great efforts that even the noisy

policemen could force a passage. A few purchases were, however, made, and we then wended our way to the shops situated in the town itself. The bazaar, which has from time immemorial been held at this spot, consists of rows of booths, situated in the shade of the walls of the Chinese enclosure and to the south of the fort. Every imaginable article is here offered for sale, including a fair amount of Indian and European goods, such as coloured cloths and cheap cutlery. Our visit to the shops was not attended with much success, for the houses were found closed and the proprietors away. The people standing near told us that the owners were absent, and that they had nothing to sell; the fact of the case was, the people were afraid to sell. However, the news from the bazaar came trickling through that we had paid for everything we had bought, and paid liberally. At length, a Nepal trader, bolder than the rest, opened his shop; two rolls of cloth were quickly purchased—at a high price—and without much bargaining, and this had the effect of bringing back the other merchants at once. Now that the shops were open, the display of goods was decidedly disappointing, and it was not until the third day, and on the eve of departure, that anything of value or importance was brought for sale, and then it was too late, for our hands were so full of work that no time could be spent in bargaining. If we had had leisure, many most interesting things might have been bought, such as red lacquer, great turquoises, gold and silver ornaments, cloissonné and old china, all of which were, as a rule, produced with great stealth and secrecy from the inner folds of the loose cloaks the Tibetans invariably wear.

Twenty tailors appeared on the afternoon of the first day, and, seated in a ring, started on making

the fur gloves, caps, trousers, etc., with which all our followers had to be clothed. They proved to be honest and clever, working from morn till night, and only resting a minute now and again to take a drink of tea.

On the second day, Captain O'Connor, as the representative of the Indian Government, paid a state visit to the Tashi Lama, who, in the absence of the Delai Lama of Lhasa, was now the head of all of the Buddhist faith, and to whom it is said one-third of the inhabitants of the world pay homage. Until within the last two months, the Tashi Lama of Shigatse had ranked second to the Delai Lama, but since the flight of the latter into Mongolia, on the approach of the British to the capital, the Tashi Lama had held the reins of office.

It is as well to mention here that the present Tashi Lama is the sixth incarnation. The remains of his five predecessors rest below the beautiful domes in the golden tombs of the Tashi Lhumpo, which will be further alluded to later on. The Tashi Lamas are longer-lived than the Delai Lamas, owing doubtless to the fact that they are far removed from, and unconnected with, the political intrigues of Lhasa.

The houses occupied by the Lama, the Prime Minister and retainers, are situated half a mile to the east of the town of Shigatse, and on the left bank of the Nyang Chu. The whole collection is surrounded by a whitewashed wall, seven feet in height, inside of which are groves of trees.

Here Captain O'Connor was informed that the Chinese General Ma, who while residing at Gyantse and fully cognisant of everything that was going on, had failed to give warning of the attack on the Mission post, and who had not even tried to save the

lives of the servants accompanying his colleague Captain Parr, an Englishman, was waiting in the house to be received by us. He had been ignored by Colonel Younghusband, and this was only a barefaced attempt on his part to get himself now recognised. Captain O'Connor, however, was not going to be taken in, and a polite message was despatched to say that we could not enter the house while this man was also in it. This soon had the desired effect, and the gentleman was bundled out by some back door.

Dismounting from our steeds, which were at once led away by clerical-looking grooms, we entered the main doorway. This was hung with festoons of dark-red and black cloth, the pillars and lintel carved and painted in Chinese designs. A broad passage turned to the right, the walls and ceiling covered with paintings, some of beautiful workmanship, comprising scenes from the religious books, gods, goddesses, hot and cold hells, and such-like cheerful subjects.

It was impossible to get more than a passing glimpse of these things, for the dimly lighted corridor was filled with obsequious monks guiding us on with bows and outstretched hands to the audience-chamber beyond.

As soon as the door was passed, the mutterings and shuffling of the priests outside gave place to a dead silence, broken only by the whisper of the one voice introducing us. Who was talking I do not know, for we had only eyes at that moment for the bowing but otherwise motionless figure, seated cross-legged on a high divan at the opposite end of the room.

This was the Tashi Lama.

Captain O'Connor was given a seat on the right and facing the throne, whilst his trusty Tibetan

helper and interpreter, who had once been a lama himself, stood a pace in rear.

On the Tashi Lama's left, but seated only a few inches off the ground, was the Prime Minister, beaming on all around, and seemingly quite contented with himself and the world in general. On this official's left, again, were members of the Tashi Lama's family.

The rest of the Europeans were given deep and soft cushions, covered in red cloth and raised about one foot from the ground, on Captain O'Connor's right, and therefore at right angles to the dais. Directly facing us stood a row of Shapés, temporal officials in yellow robes, and behind them a crowd of monks, row upon row, the farthest barely distinguishable in the darkness.

As soon as our eyes had become accustomed to the dim light, we had time to look around and examine our surroundings.

The room was not large, no larger than the ordinary prayer-room of the monasteries we had already seen. The roof was supported by numerous carved and painted pillars, all of good and rich workmanship, but much faded since they were last renovated. Hanging from it and suspended from the walls were banners of silk and brocade, likewise old and dingy, though when new they must have been of exceptional beauty.

Behind the dais and running the entire length of the room was a black wood cabinet, barely distinguishable in the gloom cast by the overhanging roof above. On the shelves, china bowls, gilt figures, and jewel-studded chortans caught the light which filtered through the row of small windows high above the doorway. The atmosphere was laden with the scent of herbs and burning incense.

The Tashi Lama's dais was raised some four feet from the floor, and like so much of the other furniture was draped in dark cloth. On this he was seated cross-legged, and remained in this position throughout the interview.

He is a young man, twenty-three years of age, exceptionally fair in complexion, with high cheek-bones and finely chiselled features, bespeaking the Mongolian race and aristocratic lineage. His voice is low and gentle, and when speaking a perpetual smile plays about his face. The hands are extremely white, and the fingers long and thin. He looks healthy but not robust, for the life of seclusion he leads is not such as would give vigorous health to anyone. Taken as a whole, his face is most prepossessing—gentleness, goodness, and bland innocence of the ways of the world being the chief characteristics. The otherwise perfect lines are a little marred by slightly prominent teeth and a rather weak jaw.

He was dressed entirely in the usual dark-red monk's cloak, but of fine material and with a greater number of slashes of red silk let in than is generally to be found amongst the highest orders. No ornaments or jewels were visible, but below the outer garb, when moving his arm, could be discerned an under-robe of gold embroidered silk.

At first his manners indicated great nervousness, for he had never seen Europeans before, and had probably but a vague idea as to where they came from. He conversed in low and dignified tones with Captain O'Connor, informing him of his age, health, etc., and then inquiring after ours—the correct way to start an interview in Tibet. As his nervousness wore off, the scope of the conversation widened, and inquiries were made as to our identity and plans.

Before long, little collapsible tables, carved and decorated with red lacquer tops, were brought in and placed before us, and on these were put small dishes piled high with dried fruits, cakes, and sweets; this apparently was only a formality, for hardly had the more enterprising spirits tasted one or two, when they were whipped away, emptied pell-mell into a blanket, carried outside and given over to our servants. Tea was then passed round, poured from large gold and silver teapots into small Chinese cups. This brew, though far from pleasing, was a decided improvement on what we had had on other occasions. The Tashi Lama kept us company, and seemed thoroughly to enjoy the tea, his cup being refilled time after time.

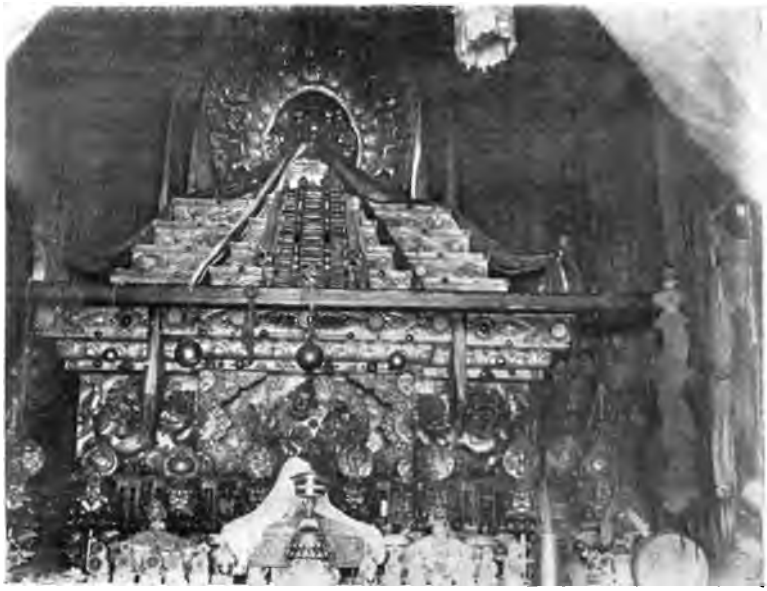
The rigid etiquette of the Delai Lama's household was obviously not in vogue at Shigatse, for it was noticed that the priests turned their backs to the throne when retiring from the room, and the attendants looked the Tashi Lama straight in the face. The people at Lhasa believe that all, except the most noble, would be immediately struck blind if they presumed to cast their eyes on the hallowed visage of the Delai Lama. Nevertheless, the Tashi Lama is far more loved and, from a purely religious point of view, respected than his more powerful confrère.

After a short pause, white silk scarves were brought in and handed to the Tashi Lama, who in turn presented one to each of us. The servants were then called up to be blessed, the interpreter as a special favour having the Tashi Lama's hands placed on his head, whilst the bowed heads of the remainder were touched by a silken tassel to the accompaniment of a whispered blessing.

The whole scene was a most impressive one, but I



THE GREAT MONASTERY OF TASHI LHUMPO.



SARCOPHAGUS OF THE FIRST TASHI LAMA; OF GOLD AND PRECIOUS STONES.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

fear our own outward appearance was not calculated to produce any great effect, for khaki uniform which has seen a year's campaigning does not lend itself to scenic impressions.

We then took our departure, bowing and receiving in return a smile and a courteous inclination of the head, and so ended a most unique experience.

On leaving the building a more informal visit was paid to the Prime Minister, whose house was situated close by. His pleasant face was already well known to us. He was a monk of high estate, having the appearance of one of the genial, well-fed abbots of England in olden time. He made us as comfortable as possible, and again the inevitable tea and cakes were brought in. Despite his protests, we could not tackle these, and so, after a short stay, left his pleasant little home, and once more mounting our ponies, rattled away to the town, through the usual crowd of sight-seers and whining beggars.

On the 16th October a visit was paid to the Tashi Lhumpo, the most beautiful monastery in Tibet, and well did the journey repay us. The lamasery consists of a number of temples and dwelling-houses, situated on the lower slopes of a rocky hill, and inhabited by about 4500 lamas. The buildings are constructed of stone, and many are of considerable size, consisting of from two to three storeys. The houses are whitewashed from top to bottom, whilst the woodwork of the roofs is in places painted red. The main wonder of the place, however, lies in the golden tombs of the five previous Tashi Lamas, their gilded roofs rising high above the surrounding houses. Outside the walls which enclose the whole of the buildings we were met by the head monks, who conducted us through the more important places of interest. Several of the halls

and galleries were certainly fine, but nothing approached the five tombs in general magnificence. Externally and internally they were very similar, with the exception that that of the first Tashi Lama was perhaps the most beautiful and lavishly decorated. The sarcophagus, which has a width, depth, and height of about twenty-five feet, stands in the centre of the room, the roof of which is of Chinese design and heavily gilded, whilst the walls are also gilded, closely painted, and hung with silks and tapestries. The base of the tomb is square, the back perpendicular, and the front, which faces the doorway, slopes backwards, rising in tiers until the summit of the tomb fades away into darkness. The sarcophagus itself is of gold, covered with beautiful designs of ornamental work, and studded with turquoises and precious stones. The turquoises appear to be all picked stones, arranged in patterns, and in such profusion as to cover every available spot, including the polished concrete of the floor. Along the ridges at the side of the tomb stand exquisite old china vases and ancient cloissonné ware, whilst golden bowls, each holding a lighted taper, and vases and cups of the same material are placed along the front of the base of the tomb. At the summit and situated in a niche sits a figure of the dead Tashi Lama with pearls hanging in festoons from above and around the neck. The ornaments forbidden to him during life decorate his image after death. Even here, European goods are represented, for, horrible to relate, amongst all this richness and beauty, five coloured glass globes are suspended, such as are used to decorate Christmas trees. Through endless passages and halls, past great images of gods and devils, gorgeously painted walls and ceilings, we were led by the higher monks dressed in grotesque hats and clothes. The rear was brought up by a herd

of dirty, perspiring lamas, who thoroughly enjoyed the exhibition, and even more so the rupees which were distributed before leaving.

While the wonders of Shigatse were being revealed, the preparations for our journey were carried on apace, and by the third day everything was ready, with the exception of the long fur coats for the followers. The Fort commanders had promised the garments on arrival at Shigatse, but failed to produce them; a visit consequently was paid to the great fortress to see what they were up to.

The Dzong, as can be seen from the illustration, is an immense building, which completely dominates the town, and presents a very imposing appearance, apparently impregnable from the outside, though a closer examination from the interior shows that the whole place is rotten and rickety. Here the two commanders reside in comfortable little rooms overlooking the town, in supreme rule of a non-existent garrison.

The climb up the steep wooden stairways to the roof was anything but pleasant, for the dust of centuries lay thick on every beam and projecting rock, rising in clouds as we stumbled upwards. It was well worth the trouble, however, for the view from the top was superb.

Nestling close around three sides of the fort, and many hundreds of feet below, lay the town of Shigatse, a busy hive of human beings, the people but little specks on a khaki-coloured background. To the south-east stretched the beautiful valley which we had but recently traversed, and to the north lay the Brahmaputra, a silver streak in the distance, beyond which again rose great snow-capped mountains. The town proved to be much larger than we had supposed,

and was divided into many sections, the intervening spaces being filled with stagnant pools of water and piles of the newly-grown bhoosa, or chopped straw. The houses are built of stone, the windows generally facing inwards and looking on to courtyards, often bedecked with flowers. Every building was white-washed from top to bottom, the walls gleaming in the sunlight. The Chinese enclosure, in which the garrison are supposed to live, when seen from above, proved to be a closely packed mass of mud huts, surrounded by a high battlemented mud and stone wall, pierced by four doorways, above each of which drooped the Chinese flag. From the brilliant sunlight on the roof we descended into dingy passages, musty cellars, and dreary dungeons, filled with rows of decaying carcases of sheep. These had been here for countless years, and were originally collected as a store for the defenders of the fort in time of war. It was no one's business to remove the dusty flesh and decaying bones, and so they remained year after year, filling the rooms and poisoning the air.

In this fort a thousand soldiers are supposed to be stationed, but not a warrior was to be seen, the excuse given by the dzongpons for their absence being that they were all away on leave, a delightful condition of affairs for the military man, and well calculated to keep up the strength of the standing army. With a popular Assembly at Lhasa, what interesting questions might be put to the representative of the War Office by youthful aspirants after political fame!

In one of the rooms close to the main gateway, lay the dried, though perfectly preserved remains of a man, with the head and limbs removed from the trunk. The following account was given as to how the man had died, probably one case out of many. He had origin-



SHIGATSE FORT.



CHINESE BARRACKS AND THE MARKET AT SHIGATSE.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

ally been a noted thief, who for his numerous thefts had received many beatings, but as these punishments had no deterrent effect upon his actions, he was sentenced to death. Now in Tibet it is forbidden to spill blood, so he had to be removed in some other fashion. On being handed over to one of the dzongpon's officials (who, by the way, took much pride in telling us the story himself), he was removed to a small room close by and locked in. A big fire was then lit below the room, and the victim was slowly roasted to death. Our informant volunteered the information, and was apparently much aggrieved because the poor wretch had died quietly.

The coats were found to be nearly ready, and were promised for the following day. On leaving, in place of tea, we drank some "Arrack," an extremely potent liquor slightly resembling Kummel in flavour, after which we were able to bid a cheerful good-bye to our rather gruesome hosts.

To simplify our departure from Shigatse and to give an opportunity to the survey party to start work well, we decided to leave in two parties, Ryder and Wood going first and taking the heavier baggage with them, while Bailey and I waited for the coats. The caravan had now reached considerable dimensions, and consisted altogether of 35 men and 44 ponies, and in addition 100 hired ponies and the requisite drivers. It was arranged that the second detachment should travel at about the same rate as the first, and overtake it when an opportunity offered. The first party left on 16th October without much trouble, while Bailey and I followed two days later. The eve of our departure was spent with Captain O'Connor, who was to remain here a few days longer and then return to Gyantse.

CHAPTER V

THE EXPEDITION REACHES LHATSE DZONG

THE morning of our departure was a miserable one. A steady drizzle throughout the night had thoroughly soaked the tents, adding considerably to their weight, and increasing the difficulty of packing them on the ponies. Miserable though it was, the people turned out in force to see the caravan leave, and to get what they could out of us. The hangers-on at an Indian dak bungalow are bad enough, but these people were far worse, for they were so numerous, and each considered his services had been of such special value: dzongpons, officials of the monastery and fort, the assistants of these officials, head pony-men and their assistants, policemen, night-watchmen, water-carriers and so forth, and then last, but not least, in a mighty battalion appeared the beggars. We parted from them at last, keeping our ponies at a sharp canter, and soon overtook the stragglers of the caravan.

The two dzongpons accompanied us for a couple of miles and then paid their adieux, giving us each a scarf of white silk before their departure.

This, our first day out, was not a pleasant one, for it rained without cessation until the evening, wetting us thoroughly and freezing us to the bone. On arriving at the intended halting-ground, so miserable did everything appear that we continued our tramp, until after 22 miles we obtained the welcome sight

of the tents of the first party, pitched in the midst of a grove of trees. The rain now ceased, the clouds cleared away, and the setting sun threw a warm glow over the surrounding country, and some hot tea steaming on the table caused the general outlook to appear much more cheerful.

An ideal camping-ground had been chosen, level, covered with soft grass and surrounded by trees on three sides. A good water supply was also at hand, for a little stream ran bubbling through some undergrowth in the centre of the patch. The fourth side was occupied by the Kang-gang Monastery, a substantial pile of buildings. Near at hand, to the west, rose one of those immense stone walls, so common and so beloved in Eastern Tibet, upon which, at certain religious festivals held during the year, great pictures of Buddha, scrolls, paintings of hot and cold hells and of places of torment are hung.

Though the march had been a long one, the going had been good, so the baggage animals turned up early, and we were comfortably settled down before darkness came on. All the impedimenta were, however, soaking wet, so it was decided to halt a day and give the things a chance of drying. The monastery is not particularly interesting, for the gods and decorations are in a state of both dirt and decay. Two large chortans in an upper room were shown, almost entirely stripped of their silver domes. The precious metal is said to have been stolen by the Gurkhas at the time of the Nepalese invasion in 1846. It is quite possible, however, that all the articles of value were at the time of our visit hidden away, for although treated with every mark of outward respect and deference, the priests were still suspicious of us. On leaving the monastery, and in fact every place we visited, the people were given small pre-

sents of money, and such treatment worked wonders. Even to the end of our journey the fact that we paid for everything used, and also gave money to those who deserved it, naturally created great surprise amongst these people. The usual custom in Tibet is that when an official, or any swashbuckler, arrives at a village, not only does he take everything without payment that he can lay his hands on, but he expects also to be presented with money, sheep, ponies, etc. The law demands, for instance, that when the Chinese Amban travels about the country, the districts he visits must pay him 600 rupees a day, so long as he is with them, not one penny of which do they ever see again. Truly the axiom of "speeding the parting guest" is most appropriate here.

On the road the following day, a pathetic drama in natural history was enacted before our eyes. Crossing the path about 150 yards ahead of us was a hawk stooping at a hoopoo, the long-beaked little bird so well known in India. Time after time the hawk missed his quarry, but each stoop brought him nearer and nearer to his prey. Catching sight of the ponies, the panting hoopoo changed his course, and headed straight for them. Twice more he defeated the pursuer, but only by a hair's breadth, and fluttering up to us, alighted on the crupper of Ka Sang's saddle, where he hung panting and shaking. On a man trying to catch him, he flew from saddle to saddle, refusing to quit this place of refuge until the dreaded enemy was out of sight. He then fluttered into a nullah and vanished.

Before reaching our destination a river of considerable size had to be forded, as the one and only bridge which originally stood here had been washed away. On either bank, however, men were in attend-



IRON CHAIN AND SUSPENSION BRIDGE OVER THE BRAHMAPUTRA.



LHATSE VILLAGE AND A PORTION OF THE MONASTERY.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

ance to point out the most suitable place at which to ford the river, and to assist in conveying our bulky goods to the other side. This work was excellently carried out and saved much annoyance, for Tibetan ponies, being only 12 hands high, are unable to cross other than quite shallow rivers without wetting their loads, and a soaking bed is never popular.

At Shabkading a well-wooded compound had been previously swept and cleaned, piles of grain and wood stacked ready for use, and cheerful fires crackled merrily beneath great cauldrons of water.

With conditions so favourable, travelling is a pleasure, for everyone is in a good temper, and the work is quickly and easily accomplished. Willing hands steady the tent poles, and others seize the ropes or bring the pegs and hammers. The tents are consequently rapidly erected, the floor-cloth soon down, and the table, chairs, and boxes assigned to their proper positions. In the meantime, the cook is engaged in the preparation of tea, a beverage invariably welcome, and materially assisting in making one content with the surroundings.

Such experiences are, nevertheless, the reverse of common in this country, and how different is the opposite picture!—the caravan not in sight, a biting wind howls across the plain, freezing one to the bone, and the weary search after fuel and water commences, often fruitless in result. Hungry, tired, and thirsty, the traveller finds what shelter he can, and waits with what patience he may the problematical arrival of the caravan.

Such experiences were not in store for us this journey, for had we not a red-coated official, armed with an order from the Lhasa Government, who clattered on ahead, riding a handsome mule, to see

that things were ready, and without doubt to guide into his own pockets the money intended as a present to us!

On the third day out from Shigatse, the expedition entered an entirely new country, Western Tibet proper, a land as different from Eastern Tibet as light from darkness. The grass-covered plains gave place to gravel, and even the character of the hills changed. Cultivation was more scanty, the villages were situated farther and farther apart, and the houses smaller.

The great Brahmaputra lay in the far distance, a silver snake in the plain; but we were not to reach it that day, for it had previously been arranged to halt at the village of Podong Tashikong. The village was a poor one, and the ground under cultivation very limited; nevertheless, our welcome was a hearty one. This was rather surprising, for the inhabitants of this plain had received rough treatment at our hands during the war. A strong contingent had been sent to bar our progress at Red Idol Gorge five months before, and though the position was naturally of great strength, the Tibetans were driven out with heavy loss. This occurred during the first advance on Gyantse, and so numerous were their casualties and so unexpected the result, that they gave up the fortress of Gyantse on the approach of General Macdonald. Of course, our present welcome may have been assumed; but it was difficult to believe it was all put on, for the maimed and sick at once came to Hira Singh and begged to be treated.

The Brahmaputra, or the Tsangpo, as it is known throughout Tibet, was not seen again until we reached its very banks and entered a rocky gorge through which it flowed. Here the first thing that caught the eye was a bridge, the first of many found at intervals

up the river, all of similar general construction. The bridge resembled in many respects the suspension bridges seen throughout Asia, but in place of the usual rope or fibre, two iron chains formed the main support, the links forged from ¾-inch bars, whilst the ends were twisted round rock, or buried deep into the ground on either side. A network of ropes hung from the chains, and along these the passenger made his way. When it is remembered that every ounce of iron is imported from China or India, one is able to understand the magnitude of the task. With the most primitive tools and, as we think, with an elementary knowledge of mechanics, these great chains have been suspended across a chasm 300 feet in width. Truly our knowledge of the Tibetans is but little. The natives all declared their ignorance as to when the bridges were erected, and stated that they were in existence in the time of their grandfathers and great-grandfathers. The general state of preservation was marvellously good, all the links being in good condition and the ropes sound.

Pin-dzo-ling was reached early in the day, and there was thus plenty of time in which to make a thorough inspection of the place.

Pin-dzo-ling is a large, well-arranged monastery, situated on the right bank of the Tsangpo, and at the foot of a rugged spur. The rocks are crowned with the remains of old temples and buildings, now fast falling into ruins; but the chief building, in which a colossal figure of Buddha sits, is still in fair condition. The whole temple is given up to this one statue, and though dust lies deep around and the various decorations are worn and broken, the immense image still stares with a placid smile through the cobweb-covered window which faces it. The walls are covered from top to bottom

with frescoes, some beautifully executed, but all representing, in one way or another, the lewd figures so commonly reproduced in all Tibetan temples.

Battlemented walls, more or less decayed, cover the hillside, and evidence the former turbulent state of the country. The modern lamasery and village form a square, the whole enclosed by a high wall, the chief temple being situated in the centre, and possessing a courtyard in front. The various houses of the gods are scattered around, one of which is worthy of mention as it contains a copper-gilt statue of Buddha, beautifully cast, and richly encrusted with turquoises.

Outside the miniature temples are the cells of the monks, all small, and each possessing a minute enclosed courtyard, and separated from its neighbour by a narrow, stone-flagged passage.

Only one monk is supposed to live in each of these houses, but as these are comparatively few and the priests are over two hundred in number, several must live together.

Many years ago, the temple above held an incarnate Buddha of its own, and was consequently revered as a place of great sanctity. On the death of the last lama the privilege passed away, though Pin-dzo-ling is even now considered of sufficient importance to have a dzongpon, who in the present instance was a most obliging man, and who succeeded the following morning in selling me a pony which died three days afterwards.

Situated close at hand is an ideal grass-covered park of some twenty acres, in which grow many splendid old trees, gnarled and rugged with age; this is the more remarkable as the park is sharply demarcated from the surrounding country, which consists almost entirely of great shifting dunes of

sand. Pin-dzo-ling must be a most disagreeable place to live in when the hurricanes from the south and west sweep down the valley; even at the time of our visit, the afternoon wind compelled us to seek shelter in the tents.

Quite a respectable durbar was held later on in the day, when the Lhasa Treaty was read to the gaping crowd; in order to further impress the people, the Union Jack was placed well to the front, but it was hard to make them understand that the flag was anything but a personal banner.

Wood and Bailey had climbed to one of the highest peaks early in the afternoon, and both endeavoured to reach camp by taking a short cut across the intervening country. Wood reached home at dusk, but as Bailey was still absent, men were sent out in search; at eight o'clock, I also started and took the back road, accompanied by some volunteers from the village. Several shots were fired from the Browning pistol to guide the stragglers; but though the reports echoed well from the surrounding cliffs no answering shot was heard. To my surprise, the Tibetans were not in the least frightened by the report of the pistol, and most of them were hugely delighted and childishly amazed at the hum of the bullet. Soon after reaching camp, the lost party turned up utterly tired out; they had encountered an impassable ravine, and were compelled to make a long detour. This afforded another lesson in short cuts.

Over 200 ponies had been collected to carry the baggage, and as the people thought that each pony would require at least one driver, the whole countryside had turned up. Only one hundred, however, were needed, and we consequently took our choice.

Splendid little beasts these Tibetan ponies are,

sturdy and well-shaped, small ears and clean legs, and at this time of the year as fat as pigs. The baggage is fastened on a small wooden saddle, with a thick pad of felt beneath to protect the animal's back, and the whole is then lashed firmly on; then away they go at their best pace in one jostling crowd, and since the road consists in many places only of a mere ledge cut out of the cliff, with a sheer drop into the river below, it is wonderful how, in the numerous scrimmages which take place, so few accidents occur.

The Brahmaputra (known to these people as the Matsang, or Horse's Mouth) now rushed through a gorge between steep and sometimes precipitous cliffs, and though this was the dry season, the volume of water was still considerable. Pretty little hamlets, surrounded by trees and cultivated land, were dotted along both banks, and occupied all the gentler slopes at the mouths of the nullahs. Just before reaching the camp at Chap-trang, a small village containing only four inhabitants, we were met by the two chief men, who came running along to greet us, bowing to the ground every few yards. They were much excited, and not knowing to whom to give the inevitable white scarf of greeting, concluded that the Gurkha orderly who carried the flag must be the most important individual, and insisted, despite the Gurkha's protests, in presenting it to him. On arrival we found that Ka Sang had already made himself at home in the best rooms of the house.

The reception rooms of a Tibetan house are far from uncomfortable, and when clean and swept present many advantages over the more pretentious buildings of other lands; at any rate, they appear to after a long and tiring journey, when the rather grimy walls are found to be hung with cotton prints and embroideries,



THE BRAHMAPUTRA IN THE DRY SEASON



PIN-DZO-LING TEMPLE AND MONASTERY.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

the room partitioned off into cosy alcoves by thick rugs, and the balconies filled with flowers.

Whatever faults the Tibetans may have, they are not lacking in hospitality, and almost before the traveller is seated, cups of hot tea, cakes, and sweets are placed before him.

Fifteen miles beyond, the valley widens out into an open, fertile plain; through the centre, by many channels, runs the tortuous and now sluggish Brahmaputra.

In the quieter reaches the waters were almost choked with fish; not little sprats, but fine fellows, varying from one to three pounds apiece. If fish of this size lie in these side pools, it is more than probable that many fine ones sulk in the deep, slow runs, and under the overhanging rocks. Indeed, such is the case, for more than once a silent swirl and the tip of a great tail were seen, as some monster rose to the surface for his evening meal. Those which were caught by the Tibetans proved to be fair eating, though decidedly bony.

On one occasion, a shoal of about five hundred, averaging two pounds in weight, was seen lying in a shallow stretch of the river by the side of the road. The water was three feet in depth, and as it shoaled gradually, the idea occurred to us that, with the help of the ponies, it might be possible to drive them into shallow water and there catch them by hand or force them on to the bank. Five mounted men were sent in, and, forming line, commenced the drive. At first all went well, and the fish surged forward in a black mass, augmented every few yards by other shoals. Expectation ran high; the ponies closed in, and with the men shouting lustily on the banks and beating the water with sticks, the trap seemed complete. The

fish were, however, now moving more slowly, and one would break back, then half a dozen, and finally all was confusion; for the whole lot, frightened at the shallowness of the water, turned with one accord and, despite every endeavour, forced their way between the ponies' legs and gained the deeper water. In the struggle the water became black with mud and the surface churned into foam: at least one thousand must have been collected together until the cordon gave way before their onslaught. They closely resembled the mahseer of India, with the difference that the feelers were longer and the scales smaller. It is possible that, like these fish, the smaller ones may take the fly and the larger the spoon, in which case the Brahmaputra will be a paradise for the angler in years to come.

Along the banks, and in the silent reaches, bar-headed geese were plentiful, and a few ducks were also to be seen; the former were at first very tame, but a few shots soon warned them that their old enemies from the plains of India had reached their hitherto safe haven. Bailey managed to account for four, with one successful shot, and these were retrieved by ten excited Tibetans, who plunged into the water together, and struggled amongst themselves for the honour of bringing the birds to shore.

Rising abruptly from the centre of the plain, and on the right bank of the river, was a great rock, every available foot of which was covered by the buildings of the Fort of Lhatse. At that time no opportunity offered of examining it more closely, as a large crowd had collected, and the guides led us at a trot into a walled garden surrounded by trees, and with a pleasant little house at one end. Here we took up our abode



LHATSE FORT AND MONASTERY.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

for two days, whilst the men camped in the garden and the ponies were picketed round the outer wall. The rooms had already been decorated with tapestries and cloths, and as everything had been got ready beforehand, including boiling water, we were soon comfortably settled. Shortly afterwards, the head monks and the dzongpons arrived, presents were exchanged, and the Treaty read; these ceremonials over, we had the afternoon to ourselves.

There was no peace, however, for Hospital Assistant Hira Singh; his fame had preceded him, and the blind, the halt, and the maimed began to arrive. First of all they came in twos and threes, and then in battalions, until the compound could hold no more. The amount of sickness among these supposed hardy people is astounding, and as there are neither doctors nor drugs, their condition at times is most deplorable. All diseases and ailments are put down to evil spirits, whose devilish workings can only be defeated by the religious ceremonies of the lamas. Whatever may be the disease, the treatment is the same: the devil must be driven out by prayers, chanting, the screeching of clarionettes and the beating of drums. Indigestion, a very common complaint amongst Tibetans, is treated in a totally different manner; for the patient is cauterised with hot irons all over the pit of the stomach, in rings or in lines. The treatment is invariably attended with success, so they say, and such is probably the case; for the stinging pain of the red-hot iron must always overpower the aching caused by the indigestion.

Cataract forms the main scourge of the land, and has assumed terrible proportions. Every village and every encampment has its band of totally blind beggars, whilst many others, including tiny children

and babies in arms, suffer from the same disease, in a varying degree. The only way to account for this is the glare of the country and the clouds of dust which sweep down the valleys of the Tsangpo and over its sandy plains. Once the disease commences, there is no cure; there are no surgeons and but few glasses, and these are of the cheapest and poorest quality, imported from India. Some are coloured, but all probably calculated to do more harm than good. The greatest boon which the country could receive would be the advent of skilled oculists.

Here I may allude to the peculiar funeral customs confined, as far as I know, to Tibet, though in some respects similar to the Parsee mode of disposing of their dead in the Towers of Silence. No European has had an opportunity of following the complete ritual, and of the many preliminaries I obtained no insight, though on one occasion, finding a considerable crowd dispersing, I went up to see what the excitement had been about, and found the ceremony well advanced. The body had been placed naked on a flat stone and handed over to two men for disposal, according to custom. These—I hardly know what to call them—cutters-up, armed with long sharp knives, accomplished their duties with dexterity, removing the head from the trunk with one or two clean, sharp strokes, and handing it over to an assistant, who proceeded to burn it in a small yak-dung fire, which had been lit close at hand. The few spectators stood some distance away, leaving a considerable space between them and the corpse, and here the village dogs had collected, whilst numerous vultures on the surrounding rocks flapped their mangy wings in eager anticipation. The cutters-up, once started, lost no time over their horrid work. The limbs were held

in one hand, and with the other the flesh was cut into long strips and flung about to the dogs and birds, which, quarrelling and fighting amongst themselves, rapidly devoured every morsel. As soon as the flesh had been removed, the limbs were severed at the joints, the bones crushed between heavy rocks, and the fragments scattered in all directions. In fifteen minutes nothing remained but a smoking skull, which was afterwards to be broken up, whilst gorged pariahs and filthy birds slouched drunkenly around, in search of hidden fragments of flesh and bone. Truly a horrid sight, but yet a sanitary one, for in this dry country a body buried in the ground would last for years. It possesses the advantage also of being inexpensive, for the men who subsist by this terrible trade receive about four annas each for their work. Wealthy relations of the deceased may be made to pay as much as a rupee, whilst the very poor are sometimes charged as little as two annas for the burial obsequies.

In the more remote parts of Tibet, where fuel is scarce, and professional "cutters-up" non-existent, the corpses are placed on the hillsides to be devoured by wolves, foxes, and vultures, or to be gradually destroyed by the elements.

Whilst Hira Singh was holding his levee in the grounds, we visited the Buddhist temple, a building similar to others already seen, but differing from them in its state of excellent preservation. The paintings were fresh and well executed, and much talent had been displayed in the decorations around the main entrance. None of the ornaments had been removed from the altars and niches, and some beautiful works in brass were shown to us, all of which were said to have been manufactured on the spot; but apparently

very little is made here nowadays, and if new gods are required, they are brought from Lhasa. In the courtyard, in long lines and seated in perfect silence, were rows of lamas and acolytes, patiently waiting with their cups in their hands for their afternoon meal. In ages they ranged from small boys to old men; no giggling, no talking, no nudging, but rows of absolutely silent and motionless figures. This attitude they maintained, in spite of the fact that they were certainly devoured with curiosity, for not one had ever seen an European before. The outer buildings were uninteresting and bare, and as the courtyard was adorned by only one or two drooping trees, the aspect was not inviting. The whole settlement was enclosed by a high and tower-flanked wall, a relic of the times when Tibet was overrun by robbers, before the days of the powerful Lhasa Government.

I was particularly desirous of obtaining a good Lhasa terrier, and as perhaps some of my readers do not know what a Lhasa terrier is, I will roughly describe him. He is a small iron-grey, long-haired little dog, with prick ears, eyes covered with hair, and a rather curly tail, resembling in many respects a Skye terrier. The monks keep these dogs as pets, and the Delai Lama is reported to have a kennel of them in the Pota-la at Lhasa. No care, however, has been taken to keep the breed pure, so it is exceedingly difficult to obtain a good specimen. We made several inquiries on the road as to where we could find one of these dogs, and were repeatedly told that they could be obtained at Lhatse. The dzongpon was consequently informed of our wants, and although he expressed himself as ignorant of the exact kind required, yet he would send round all the small dogs in the place.



Hira Singh doctoring sick Tibetans at Lhatse.



Lamas of Lhatse bringing their Dogs for sale.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

The next morning they appeared, each carried by a lama, men and dogs forming up in line opposite the house. The latter were nicely got up with collars and bells, and obviously decorated with a view to please the eye. No adornments, however, could disguise the fact that they were horrid, snappy little beasts, of all colours and dispositions. Only one at all resembled a terrier, and he not only had a vile temper, but had lost his tail. It was useless to buy such animals, so masters and dogs were dismissed, much to the delight of the latter.

In the afternoon we visited the fort, passing through several archways before reaching the main door. The building is wonderfully constructed, for the top of the rock is extremely narrow, and in order to obtain sufficient room and to find a firm foundation, the outer walls rest on narrow ledges half way down the precipitous sides. Though much ingenuity had been displayed in its design, yet in construction it is very weak, and the walls in places of hardly sufficient thickness to bear the weight above. In former times this dzong was a famous stronghold; for the water question, the cause of so much weakness in other Tibetan forts, was of no consequence here. The water bastion overhangs the river, and from this building the defenders could obtain as much water as they required, without the danger of exposing themselves. The broad and sluggish Tsangpo washing against its northern face also offered many chances of escape in cases of defeat. With the advent of heavy guns, a strong Government at Lhasa, and the British Raj at the gates of Tibet, those old days of bloody fights and lengthy sieges have gone, never to return. The dzongpons, however, were none the less proud of their home, and

although they confessed that their troops consisted of but two men who lived in the village, yet they delighted in their castle in the air and their apparently dominating position over the village and country below.

CHAPTER VI

MOUNT EVEREST

THE route invariably taken by traders leaving Lhatse for Western Tibet runs parallel to, but many miles to the north of the Brahmaputra. Though the going on this northern road is nothing to boast about, it is preferable to the tracks which run along the banks of the river. This trade route again touches the Tsangpo 160 miles beyond Lhatse, and as the course of the river up to this point was quite unknown, we determined to follow it up.

For this purpose, and in order to survey as much ground as possible, the expedition divided into two parties. It was settled that Wood and Bailey should keep to the trade route, taking with them all the heavy and spare baggage and the private transport ponies, while Ryder and I, lightly equipped, would follow the river.

The next morning we set out, having carefully arranged the kits the evening before into two lots, in order that the start might be made without any muddle, yet even with this precaution we went off with the bedding belonging to a military surveyor of the northern party. Fortunately for this man, his bundle was noticed by us in the evening and was returned to him the next day. There are some people in this world who never can look after their own things.

The beggars turned up in force, for this was an opportunity not to be missed, and the last chance they would have of working on our sympathies. They were much upset, however, by the departure of the two parties in opposite directions, for, not knowing which to follow, they ran from one to the other in eager and noisy anticipation, but with no equivalent result. Wood and Bailey were obliged to retrace their steps for a mile in order to reach the ferry, where the ponies were unladen and their loads transferred to boats. The ponies themselves were made to cross at the ford, which for two months in the year exists at this place. The river, even at this low-water season, was none too shallow, and it was as much as the animals could do to keep their footing.

For the greater part of the day we could see their caravan moving over the plain until they disappeared into a valley to the north, and it was not for another fortnight that we met again.

Our own party had to make a considerable detour before rounding the bend of the river, which here divides into many channels. The latter half of the march was over ground covered with loose stones, and the sight of a little garden, hidden behind some houses in which we were to camp, consequently came as a welcome surprise.

The two next marches ran alongside the right bank of the Brahmaputra. The path consisted of a narrow ledge cut into the cliffs which overhung the river, always rough, and often resting on wooden props. So narrow did it become in places that the ponies were unable to proceed with their burdens, which had to be removed and the baggage passed along by hand. Even with this precaution, one of the loads of bedding, while being carried by a coolie,

struck a projecting rock, and to save himself the man was forced to loose his burden, which fell with a clear drop of some 200 feet or so into the river below. The bundle had been tied up in a mackintosh sheet, which proved sufficient to keep it afloat, and so, after bobbing about on the surface for a time, it sailed gaily away down the river. We could do nothing to recover it, as the cliffs were perpendicular, and the current soon swept it round a bend, and out of sight. The Brahmaputra, however, was not to be its grave, for a lynx-eyed Tibetan on the left bank had seen the catastrophe, and racing down the path, kept level with it for many miles until a favourable opportunity offered, and it was retrieved from a back-water. The owner, though bedless for the night, was able to dream of pleasant nights to come.

A peculiar shaped rock, with deep water on either side and covered with flags, rises from the centre of the river at one place. For some time we wondered how the flags had ever been placed there, and only discovered later that even in the depth of winter the rapid current is insufficient to prevent the river from becoming completely frozen over, and the opportunity is then seized by the devotees to renew the flags, which, ever fluttering in the breeze, waft prayers to the gods.

Where the Chi Chu, a stream of considerable size rising in the southern hills, joins the Tsangpo, the pathway leaves the main river and follows the tributary, leading through a delightful little valley dotted with fields and homesteads, and well irrigated by rivulets which flow from all the side nullahs. It is as peaceful a spot as one could wish to find, and inhabited by a cheery, pleasant people. Not only is it pleasing to the human eye, but it seems to be

equally appreciated by game-birds, for coveys of partridges and ram chikor were seen scurrying about in all directions.

Nature favours the inhabitants of the valley to such an extent as even to provide them with hot baths, for a splendid spring of hot sulphur water is situated at its upper end. This gift the people have taken full advantage of, having built a large roofed-in tank to collect the hot water, and erected stone huts all around in which they can dress and at the same time discuss the topics of the day. Shelves and fireplaces make it evident that when they come to take their baths the people treat the occasion as a pleasant picnic.

The exit from the valley proved as difficult as the ingress had been easy, for the path, after running over soft turf for a couple of miles from the camp, without the slightest warning, led us straight at the almost precipitous wall of rock which bounded the valley to the north.

It would have proved a hopeless task to have tackled the 1000 feet of boulders with ponies, had it not been for the villagers who came to assist us on our way. Not only could the ponies barely keep their feet, but the saddles having no breast-bands, slipped over their hindquarters. Two men to each load, however, made all the difference; for the pony was pushed and pulled up the steepest parts, and then turned with his head downhill, in order that the shifted load might be readjusted. After a good breather at the summit, the descent was made with comparative ease, though the path dropped considerably before reaching the banks of the Brahmaputra.

We had now entered a gamey-looking country, studded with thick scrub jungle and patches of grass,

and well irrigated with water. As the caravan wended its way in and out of the bushes towards the more open country, numerous coveys of partridges were disturbed, most of which provided us with one or more birds for the pot. They were hardly worth shooting except for this purpose, for nothing would make them rise, not even when stones were thrown. When surprised on the path, they just looked at you in a casual manner, and after a few more scratches in the gravel, vanished unconcernedly into the undergrowth. My orderly, a sturdy little Gurkha, would puzzle his wits as to how to circumvent these running birds, sometimes with such success as to get into the line of fire, and nearly get shot himself.

Another habit these partridges have is that, when one is wounded and fluttering on the ground, its mate, and at times the whole covey, will attack it viciously, jumping up and down on the body, and successfully driving out what little life remains. The ram chikor were even more tame, for they took no notice whatever of man, and often very little of the shot. So numerous were these birds in places, that I on one occasion bagged five with a No. 6 cartridge. Still other game-birds were found, notably the beautiful Tibetan sand-grouse, but they were never so plentiful as either the chikor or the partridges. However, they made up for their comparative scarcity by additional stupidity, never flying more than a few yards, even when the same covey had been blazed into time after time. Perhaps it was just as well that they behaved in this manner, for everyone in camp appreciated these delicious birds, and cartridges were scarce.

A few miles beyond the point at which our path had struck the river, the gorge widened into a beautiful

valley some ten miles in length. Many small villages and homesteads lay dotted about the plain, each surrounded by trees and cultivated land. The houses were whitewashed and substantially built, and the people looked happy and prosperous. With the rich soil and the seclusion which this valley offers, it is curious that the country is not more thickly populated, for there remain large tracts of fertile ground covered with close grass, more than sufficient for the flocks of sheep, ponies, and donkeys of the present inhabitants.

The arrangements made by the officials for our comfort on arrival in camp still continued to be excellent; grain, bhoosa, and wood were laid out in heaps, and cows tethered close by stood waiting for the milking. The milkmaids, however, did not come up to the usual standard of beauty and cleanliness, and the cows would never give milk until a stuffed calf and a feed of chopped straw had been placed before them; when these seductions were insufficient to induce the animals to do their duty, the desired result was arrived at by persuasive scratching of their backs.

Still a few miles farther on, and, situated on the opposite or northern bank of the river, rose an enormous and precipitous rock, which at one time must have been a famous place. The actual summit, towering many hundreds of feet above the plain, was practically hidden from view by the remains of ancient temples and houses. It was too far off and too inaccessible to visit, so its exact size could not be determined, though even the part visible was of sufficient extent to have housed many hundreds of monks. Close to the foot of the precipice nestled a charming little village, certainly a much more pleasant spot to inhabit than the dwellings perched high up on the barren, sun-baked, and wind-swept pinnacle.

A short distance farther up the valley stands Rujé Monastery, balancing on the edge of a steep precipice rising sheer from the river bank. It is enclosed on the other sides by high walls, but the whole place looks poverty-stricken and shabby. The monks are probably fairly well off, in spite of the dirty and dilapidated condition of their houses, for the village which lies at the foot of the hill presents all the signs of prosperity.

The only feature of special interest in the village is an immense gilt-domed chortan, far and away the largest that I have seen in Tibet, with the exception of the huge edifice at Gyantse.

A double span chain bridge crosses the Tsangpo close by, a mass of masonry in mid stream forming the central support. Really a wonderful piece of work, when we consider the primitive tools these people possess.

Beyond Rujé we could not progress, for great cliffs rose sheer from the river, entirely blocking the road to all but goats, though the natives maintained that coolies could scramble along. We consequently turned to the south, only too glad to leave these monotonous valleys, from which no view of the surrounding country could be obtained. The low-lying district which lay before us was rich with a verdant green grass, and the ground in places so boggy that our passage was much impeded. Innumerable donkeys, ponies, yaks, goats and sheep simply covered the ground, whilst perched on all the higher and drier spots were villages and ruins. The old towers and gaunt walls of former great buildings showed how densely populated and how important this place had once been. All, we were told, had been utterly destroyed by the Gurkhas during the war of about fifty-five years before. The earlier devastations,

however, had not driven the people from the most favoured places, for new temples and houses had sprung up in all directions, the old buildings being left where they were, to gradually decay. Many hot ferruginous springs bubbled from the mountains on the left, but no baths had been made here, as in the valley of the Chi Chu. Higher up the hills, partridges swarmed; I could never have imagined that so many birds existed in one place.

Our camp was pitched by some shepherds' huts, immediately below the head of the nullah, 2000 feet above the river and full in the teeth of the bitter wind. So unpleasant was this spot that we departed the following morning as early as possible, crossing the Kūra La (17,900 feet) in deep snow. No sooner was the summit reached than we realised that, if a conical hill close by was climbed, we were certain to obtain a fine view of Mount Everest, and from a direction never before seen by Europeans.

The morning was cold, crisp and clear, so, turning our backs on the ground from which the mightiest mountain in the world uprose, we climbed steadily until the crest of our observatory hill was reached; and well did it repay us, for to the south, and distant about fifty miles, though to all appearance much nearer on account of the rarefied atmosphere, lay the wildest part of the Himalayas fully exposed to view.

Towering up thousands of feet, a glittering pinnacle of snow, rose Everest, a giant amongst pigmies, and remarkable not only on account of its height, but for its perfect form. No other peaks lie near or threaten its supremacy. From its foot a rolling mass of hills stretch away in all directions, to the north dropping to the Dingri Plain, 15,000 feet below. To the east and west, but nowhere in its immediate vicinity, rise other

great mountains of rock and snow, each beautiful in itself, but in no other way comparing with the famous peak in solemn grandeur. It is difficult to give an idea of its stupendous height, its dazzling whiteness and overpowering size, for there is nothing in the world to compare it with. Its northern face had the appearance of a sheer precipice, but the distance was too great to decide upon this with certainty.

Mount Everest has only been known to the civilised world for rather over half a century, and its discovery was but little more than an accident; for from nowhere in India is the great mountain visible except as a peak just showing up over the shoulders of other and nearer ranges.

The method adopted of measuring the heights of the Himalayan range was that of observing from three or more points in the plains to every prominent snow-peak visible, and working out the results at leisure. Great was the excitement one day, when a computer working at these observations obtained a height surpassing that of all previously known peaks. "Mount Everest" was the name given to this, the highest known point of the world's surface, and 29,002 feet above sea-level. It was called after a famous Surveyor-General of India, as it was unknown and unnamed by the natives of India. This nomenclature dissatisfied many, and from time to time attempts have been made to change it, amongst others to Chomo Kanker and Gori Shanker, but without success. For the purpose of finally settling the question, Captain Wood was sent to Katmandu in 1903, and there found that to the Nepalese the mountain was nameless. The Tibetans questioned by us replied to the same effect, and so now and for ever it will be known as Mount Everest. As a result of these in-

quiries Colonel Burrard has obtained promises from Germany and other nations to substitute "Everest" for all names now in use.

Another point of great interest to geographers has always been, whether there might not be similar but higher mountains in the neighbourhood, yet not visible from India. This question we were able to settle, for the great peak has no rival, the country falling steadily away to the banks of the Brahmaputra; whether farther east or in the Kuan Luan Mountains there is a mightier mountain, remains to be seen.

The wind was too bitter to stay long in our exposed position, which, by the way, was the watershed between the Ganges and Brahmaputra basins, so, leaving the coolies to follow with the plane table at their own pace, we hurried on to shelter and warmth. Our progress over the open was rapid; for the ponies, likewise chilled to the bone, went scampering and bucking over the stony undulating slopes. Then we entered a gorge the bottom of which the sun rarely reaches, and here were obliged to carefully pick our way, as there was no path; for the ravine was nothing but a slit in the mountains, and the bed full of rocks. Mile after mile this continued, the road falling rapidly, until at dusk we debouched on to the Dingri Plain, which Monsieur Huc sixty years ago declared to be the home of the unicorn. Kaju is built in an entirely different style from the villages passed on the road from Gyantse. In place of the pleasant little whitewashed houses with their grassy lawns and rows of trees, we now find bare, uninteresting blocks built of grey limestone, surrounded with cattle-pens, and not a vestige of anything green to relieve the monotony.

In this not too clean and decidedly odoriferous spot we were compelled to stay for a day, for the cook

became seriously ill. He had been ailing for some days, and though he had high temperature, quinine and phenacetin seemed to have no effect upon him. He was persuaded by the headman of the village to allow the local medical practitioner to pay him a visit.

The doctor soon appeared, carrying a big bag, and wearing an air of great importance. His entry into the tent was not quite so dignified as one would have expected from one of such learning, for it was made on hands and knees, crawling through the refuse of the yard, with the bag trailing behind him. The case took a long time to diagnose, with the result that he ordered immediate bleeding. What the complaint was I do not know, but it would have been the death of the man to have allowed this drastic treatment in his then weak state, and so the medico was dismissed after receiving his fee, and the patient recovered in due course.

Ryder rode nearly across the plain in the afternoon, saw Mount Everest again, and found that the great grassy plain we were in stretched right away to the Himalayas. From the herds of yaks and sheep seen, it was obvious that the district is a favourite grazing-land. The water drains away past Dingri, a village of considerable size, to the east of Everest, and then through Nepal into the Ganges.

A delay of one day is usually followed by a long march in order to make up arrears, and on this occasion we had more than we bargained for, crossing again into the Tsangpo Valley, and eventually camping in some old sheep-pens, where we were received by the usual local officials. Such delightful hosts our new friends turned out to be; nothing they could do was too much trouble for them.

Here, we caught our Tibetan interpreter receiving

bribes, or rather presents of money, from these people. When remonstrated with, he said, "What could he do?—the people *would* give him money." This was more or less true, but still it did not suit our plans, so the custom came to a timely end. This man, Lodu by name, we had taken on as an interpreter, but he was a horrid villain, and his ideas of obedience and discipline were at first most primitive. He had originally come up from Darjeeling as a dhooly bearer in the employ of the Tibet Mission, and as he possessed a fair knowledge of Hindustani had been promoted to interpreter by the Mounted Infantry. This advance had unsettled him, as he promptly developed into a thorough scoundrel, and laboured under the delusion that he was equal to any Rajah. Once we caught him wearing an official badge with which he endeavoured to deceive the people into the belief that he was the representative of the Lhasa Government, and the one to be appeased—gifts of money being most useful for that purpose. After correction and persuasion of various sorts, he eventually improved and mended his evil ways.

The valley of the Brahmaputra now changed its character considerably. The river ran through a more open country, with low and rounded mountains on either hand. Lelung was the largest village passed through, mainly noticeable for the countless pigeons which had taken possession of the houses and fields. In hundreds of thousands, they literally covered the place, and when rising, filled the air with the roar of beating wings. Their flights were usually brief, and they soon settled down again in a grey-blue mass, completely obscuring the ground from view. What they found to feed on, goodness only knows, for the crops had been gathered many days before.

The weather had of late been getting perceptibly colder, whilst each night the thermometer steadily and progressively dropped one or more degrees. Winter was obviously near at hand, and the weather was sometimes so cold that one might justly say that it had actually begun. The grass was dead, the last few leaves were dropping off the village trees, and great ice floes were rushing down the Brahmaputra. What glorious days those were for marching! Never too hot; and if too cold, then by increasing the pace one rapidly became warm again. Walking was preferable to riding, for on a pony it was difficult to keep warm, and the leg on the sunless side soon became like ice. The wind did its best to spoil what would otherwise have been perfect weather, for about 10 a.m. a strong breeze from the west would always spring up, gradually increasing to almost hurricane force, and as this was the direction in which the caravan was travelling, men and ponies received the full benefit of it in their faces.

Once more did we have an accident with the rolls of bedding, for on crossing a narrow bridge one pony pushed another over the side. Fortunately for him, the loads were firmly strapped on, and the drop was only eight feet. The animal fell on its back into water deep enough to cover everything but its legs and the upturned head, and there it kicked and struggled until hauled bodily out. It was a most comical sight, and much appreciated by Ryder, who enjoyed the scene immensely until he discovered that the bedding was his own particular property.

One mile above Lelung the road ceases, and starts afresh on the right bank of the river. The crossing was carried out by means of a ferry boat, which was poled and paddled across the river. The boat was of the most primitive description, made of stout, rough

beams of wood, held in their place by iron rivets. From the bows rose a large bundle of sticks, from which fluttered numberless pieces of linen, covered with printed prayers. In front of this again projected the wooden head of a horse, better suited as a post to which to fix the tow rope than as an adornment. She leaked horribly, and two men had to bale hard to keep her afloat. Despite her apparently rotten condition, she carried a large cargo at each trip, generally made up of eight ponies, twelve men and a pile of baggage, and the whole of our little caravan was across in four trips. The boatmen and owners of this ferry were the monks of Lelung Monastery, and thoroughly understood the erratic behaviour of their craft, probably knowing more of this work than of the intricacies of their religion. One felt quite sorry for them wading waist deep amongst the ice floes, for it was cruel work, and only by this means could the boat be got away from the banks. The first attempt was a complete failure, the boat striking the same bank again 100 yards lower down. Nothing daunted, the priestly boatmen set her adrift again, and this time with complete success. No other misadventures occurring, everything was transported to the northern bank in under two hours, and six drifting and shivering priests waited to be paid. There did not appear to be a great amount of traffic by this ferry, but the monks probably make a very fair thing out of it during the nine months of the year when the river is not frozen over. Our clerical friends told us that in three days' time the boat would cease to run, and that in ten days men would cross on the ice.

At Yenju, a village of considerable size, there existed a few stony fields, the last cultivation we were to see for many hundreds of miles. The people here



FORCING THE FERRY-BOAT THROUGH THE ICE FLOES OF THE BRAHMAPUTRA.



GURKHA ORDERLIES AND AN INTERPRETER.


LIBRARY
OF THE

live almost entirely on milk and flesh, for grain is both scarce and dear. The whole of their time is taken up with yak and sheep breeding and in attending to their enormous herds.

Yenju had been considered by the Lhasa authorities as too far distant from the seat of the late war for recruiting purposes, and its inhabitants consequently escaped military service. Rumours of the fighting had, however, reached the people, and they knew very well that we had entered Lhasa; consequently the whole countryside turned out to see the foreign devils. However, devils or no devils, the people were as delightfully keen to assist as ever, and spent the entire day in scrutinising our actions, and hanging round ready to lend a hand when required.

Breakfast we always had in the open, in order to allow of the tents being struck and packed without delay. This gave our wild-looking friends an opportunity of examining us at their ease, and a subject to discuss for weeks to come. The natives knew that this meal was going to be taken in the open, and that it was a sight worth seeing; so they would collect early and spend the time until we appeared in watching the cooks prepare the breakfast. As soon as we were seated, however, they moved to the table and to the best points of vantage, and from there watched every mouthful disappear with the greatest interest; for it must be remembered that such a thing as a fork or spoon is unheard of in Tibet. Chopsticks are used by the wealthier of the people, but the ordinary person only shovels the food into the chasm waiting to receive it, with the instruments Nature has provided. This attention was rather annoying at first, but like other disagreeable things, one gets used to it in time.

These early morning breakfasts in the cold, with the sun just rising over the horizon, were at times rather trying. Forty degrees of frost, without wind and with plenty of exercise, is delightful; but when seated at a table, chilled to the bone, this temperature, if accompanied by a steady wind, is apt to make one fretful. One of us, it does not matter which, would always insist upon four courses at this meal, for without them, he said, he could not do his work. At first this was not found to be very difficult to arrange, as he could be supplied with two courses of eggs and two of meat. But when the eggs ran out, then the trouble began. Our cooks were not French "chefs," and their menu was exhausted after providing two courses—chops and steaks, both of mutton. What were we to do? The problem was easily solved. Firstly chops came in and then steaks, after which three of us left the table; then our hungry friend had chops and steaks again, the rejected parts of courses one and two being served up afresh, turned over on their opposite sides, in order to give the outward appearance of a new and enticing dish. This method produced the desired result of appeasing our comrade's voracious appetite.

The bed of the Brahmaputra, up to this time narrow and rocky, here opened out to a width of several miles. Immense sand dunes rose in all directions, in and out of which the now sluggish river wound its way. Half-frozen pools of water lay everywhere, used as a resting and feeding ground for a few wild geese which still lingered on their way to the warmer climes of India. Although we were marching rapidly, yet a sharp look-out was kept for any game which might be about; but these sandy stretches of country apparently found no favour in the sight of game animals. Not even the hardy and inquisitive

wild ass was to be seen. Just before reaching Sa-ka Dzong, both kiang and gazelle were, however, found grazing on the greener patches of grass, and from here onwards daily increased in numbers.

Sa-ka Dzong was not visible until we were almost upon it. Though a fort by name, it is only so called by courtesy, and because the official in charge is entitled to the rank of "fort commander." It is, however, a place of considerable importance, not so much from its size as that it is regarded as the centre of a very large district.

Sa-ka is a straggling village of about twenty-five mud-brick houses built under the shelter of a low ridge, and on a mound lying just above the level of the plain. All around lies marshy ground with numerous pools of water and, as a consequence, a plentiful supply of grass. It is one of the regular changing places (*ta-sam*, or horse-bridge) which lie at intervals of three or four marches for the entire distance between Gartok and Lhasa.

As soon as we came within sight of the place, the Union Jack was seen floating bravely from the roof of one of the houses. Our march had been long and tiring, and this sight was indeed a cheering one; for it showed that the northern party had, since leaving us a fortnight earlier, got along without any great difficulty, for they had had about the same amount of ground to cover and had beaten us, as it turned out, by one day. Wood and Bailey had seen us in the distance, and almost before we entered the place a welcome meal was steaming on the table. The men of the party were all well, but not so the ponies, for the rate of travel had begun to tell seriously on them. Several, being aged, had fallen off in condition, and, in consequence, their old wounds (from which no

Tibetan pony is exempt) were opening again. Two of the oldest were shot—a kinder act than leaving them with the Tibetans to attempt to struggle through a hard winter. Two others, younger and in better condition, were given to the villagers, and may still be gracing these wild plains.

The route which the northern party had followed was found to be but very little better than the one we had traversed. The going had been heavy and rough, and the passes numerous. Cultivation had ceased at a much earlier period of their journey than had been the case with us. Villages and people were both scarcer, and trees almost a minus quantity. Altogether everything pointed to the probability that, when the road along the Brahmaputra is properly made, if such a thing is ever done, the alternative route taken by Ryder and myself will be the more favoured.

From a zoological point of view their journey had brought one or two most interesting natural history events to notice. Wood, for instance, had on one occasion seen a snow leopard, an animal not supposed to exist in these parts. What was really of more importance was, that on another occasion he saw a troop of monkeys. Now it must be remembered that the country passed through was destitute of all vegetation but grass, and that the hills were bare and rocky. One of Captain Bower's men, the famous scoundrel Abdul Khalik, in 1890 reported having seen one monkey several marches north-west of Lhasa. This had been doubted by many, and it has never been believed that monkeys existed in the uplands of Tibet. One day, near the village of Sang Sang, Wood had been detained at survey work, and whilst hurrying down the hill saw, five or six hundred yards away, many animals moving amongst the rocks. Looking at them through

his glasses, he found them to be a troop of monkeys. Unfortunately, the day was fast drawing to a close and he was still far from camp, so felt little inclined to set out in the opposite direction on what might have been a fruitless quest. Had he been able to obtain a specimen then, all doubts as to their nature would have been set at rest. On hearing of what he had seen, I questioned the natives carefully, but their answers were as unsatisfactory as Tibetan answers generally are. Some declared that there were no such creatures in the country, while others said that monkeys do exist, but that they come from Nepal during the summer months. That some find their way down the northern slopes of the Himalayas is quite probable, but if they merely make a summer incursion, they are not likely to be found here in November, when forty degrees of frost is being registered nightly. Furthermore, Wood saw them on the northern bank of the Brahmaputra, a river they are hardly likely to swim, and which they must therefore cross by the chain bridges or on the ice, when the river is frozen during the winter. The conclusion to be drawn, therefore, is that they are indigenous to the country.

Hardly had the two parties reunited when it was determined to again split, in order to explore a great bend the Tsangpo makes to the south of Sa-ka.

It was arranged, therefore, that Wood and I should take the more direct route, whilst Ryder and Bailey followed the course of the river, and as the journey would occupy at least six days, should travel light, taking one tent only and relying entirely on hired transport.

CHAPTER VII

"FAR FROM THE MADDING CROWD"

Our journey along the trade route was an uneventful one. Moving through stony plains and sandy valleys, it took us all our time to reach camp before dark. We thought of halting somewhere on the road and having a day's shooting, but as Wood was anxious to reach Tra-dom as rapidly as possible, in order to measure a base for survey before Ryder's party arrived, we kept steadily on.

There were probably a fair number of ovis ammon about; for the second day out, soon after leaving camp, I obtained a momentary glimpse of five rams on the hillside. These I determined to go after. A long climb brought me to the spot, but neither tracks nor animals were to be seen. Not until I had been over almost the entire hill, and was on my way back, did I spot them again, and this time lying down on a ridge near by. There was only one direction in which an approach to anything like a shooting range could be carried out, and I was grieved to see my shot strike one of the animals high up in the shoulder, too high to kill. I followed the herd up, and again found them in the next nullah, but in such a position that I could not get anywhere near enough for even a long shot. The wounded one was lying down, and the others grazing close by. A wait of one hour in a bitter wind, with about twenty degrees of frost, was fruitless of result,

and so at midday I left them. I had hoped by not disturbing them that my ovis ammon, which was very sick, would shortly die, and that by the help of the Tibetans his head, an extremely fine one, would be eventually recovered. As fortune would have it, the march turned out an unusually long one, and darkness had fallen before we reached the new camp of Ny-aku. Here I explained to the Tibetans what I wanted done on the following morning, and though I know the men set out to look for the head, I have never seen it or the men from that day to this. If this had happened in Kashmir with ibex, burhel, or shapoo, a head would have without doubt been brought in, but then it would not have been the head of the wounded beast, but one from a village close by. Such are the ways of the Kashmiri shikari. A nice head, a little fresh blood, a good reward from the delighted but foolish sahib, and a "chit" to say what splendid eyesight the shikari had, would have ended the story.

After Wood and I arrived at Tra-dom, two days were spent in measuring a new base, repacking the remaining stores, and inspecting the gompa.

Tra-dom is considered to be a village of much importance in this part of the world, though to us it seemed the most outlandish place in existence, for no grain is grown nearer than 120 miles, and no wood found within a radius of 150 miles. In spite of this, it appears to be a favourite spot, and possesses a well-built stone monastery, situated on the east, and therefore sheltered side, of a low spur which projects from the mountain range to the north. This building is in good repair, and decidedly well furnished, considering the distance it is from any civilised town. The priests, five in number, showed us round their temple and its outbuildings, but it resembled exactly so many other

monasteries that we soon got tired of prying into its hidden mysteries or dark and dusty recesses. Figures of gods and devils sat in rows wherever room permitted, clothed in faded silks and embroideries—and much they must have needed their coverings, for the interiors of the buildings were bitterly cold. One large cup of gold, of beautiful design, similar to others seen at Shigatse and Gyantse, stood before the largest Buddha, and burning in it was the everlasting light, insufficient to show in any but the faintest way the outlines of the peaceful face. A small douceur to the guardians was not only received with evident surprise, but persuaded them to rise to the occasion and escort us back to the stage-house.

Below the monastery were two other stone buildings, used as rest-houses by travellers. The larger of the two, but the more dilapidated, was for the accommodation of yak-drivers and the servants of officials; the smaller building was quite a nice house, with a courtyard surrounded by a high wall, and having two rooms and a passage. The wall was of great advantage, as we were not worried by Tibetans continually passing, staring in at the doors and windows, when they think you are not looking, or searching amongst the baggage for some imaginary article. The manners of the people are preferable, however, to those of the Chinese, for they never venture so far as to pull aside the flaps of the tents or to lift up the flies in order to watch every movement of the occupant.

Whilst on the subject of the Chinese, I may mention that this race is practically non-existent in that part of Tibet which lies west of Lhasa. There are a few merchants in Shigatse; six more between that place and To, a Chinese post-office, one march beyond Lhatse, after which no more are to be seen.

Numberless fresh-water pools lie scattered about the plain, but were now frozen solid, and around these roamed immense herds of yaks, sheep, and goats, nibbling at the roots of the withered grass. During the winter the sheep exist on the great store of fat they lay on during the fruitful season, whilst the inhabitants live on the sheep, and probably get thinner in the same proportion as the sheep become emaciated.

At this place we set to work to doctor the ponies and mules. One of the latter was a beautiful cream-coloured beast from Kham, which had been ridden at the Karo La fight by a Tibetan officer, and had been wounded in the fetlock and captured by the Mounted Infantry. A nasty-looking growth of flesh had sprung from the wound, which irritated the animal at night and which he used to bite, though at no time was he actually lame. The wound was so ugly that I determined to try and cure it; we had a great struggle with our patient before we could apply the caustic and bind him up. The next day it was necessary to remove the bandages and put on some fresh solution. The dear creature was as quiet as a baby and the operation was practically completed, when, seeing that a little further manipulation of the bandage was required, I bent down to take it off gently. The next thing I remember was turning a somersault in the air with stars shooting all around, and blood pouring down my face and from my nose. The mule's bandage was off, and he had a smile upon his face. I blessed him and left him in peace; in fact, I continued to bless him for several days afterwards, for I could hardly breathe, and could eat but little. That mule still has an ugly lump of flesh growing from his leg.

Luxuries had by this time given out. Our store had never been a large one, for before leaving Gyantse we had collected what we could from the different messes, and as may be imagined the aggregate was not very great. Wood and Bailey, when they were on march from Lhatse Dzong, learnt that no more eggs would be procurable on ahead, so a messenger had been sent back to collect what he could. In numbers he was very successful, for he obtained seven hundred. Great was the disappointment, therefore, when on cooking them, they were found to possess no whites, and that the yolks were merely little frozen balls, varying in colour from a pale yellow to a vivid red.

Since the day we left Shigatse we had been slowly but steadily rising, and were now at an altitude of 15,000 feet. The Brahmaputra, now much diminished in volume, could be seen several miles to the south of the road, twisting and turning amongst the sand dunes in its effort to leave the plain. The river had so dwindled from two causes, firstly, on account of the numerous tributaries already passed, and secondly, on account of the snow having ceased to melt. Even in the full rays of the sun the warmth emitted was hardly sufficient to soften the snow on the slopes, and had no effect at all upon that which lay on the level ground. In the narrower reaches of the river itself the ice floes had in many places blocked the channel, thereby forming rough but safe causeways. So firm were these bridges that it was over one of them that Ryder, with his yaks and ponies, passed from the southern to the northern bank, on the day he rejoined us at Tra-dom.

Ryder and Bailey reached Tra-dom about midday in a snowstorm, which was not, however, sufficiently heavy to keep down the clouds of dust swept up by



INTERPRETER. HIRA SINGH. RAM SINGH

AT WORK.



A CHORTAN ON THE RIGHT BANK OF THE BRAHMAPUTRA.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

the wind. They had had a successful journey, and had mapped in the whole of the great bend which the Tsangpo makes in this part of its course. Once more united, the party started afresh the following day, but before leaving the last despatch of letters for India and England was handed over to the local officials. Others had been sent off in a similar manner from Shigatse, Lhatse, and Sa-ka, though we had little expectation at the time that they would ever reach their destination.

Stamps were not utilised, for such luxuries are non-existent in Tibet, and the various officials refused to receive any money, stating that no payment was required, as the letters were on Government service.

These men knew that we should probably never see them again, and that were the mails thrown away, no inquiries would be made. Notwithstanding this, and the fact that the letters had to be carried over many hundreds of miles, not one was lost, or even delayed.

The post must have travelled at the rate of thirty to forty miles a day, the carriers changing ponies at each relay station.

For this, the Tibetans deserve the greatest credit, and the result shows that under official orders they can be implicitly trusted.

CHAPTER VIII

UNLIMITED SPORT

On leaving Tra-dom, we struck straight across the plain to a gorge in the mountains to the west, through which the river passed.

The country was covered with gazelle, but they were far too wily to offer any but the longest shots. Not only were they suspicious of the ponies, but even of the yaks, never allowing any to come within 300 yards.

As soon as the gorge was reached it was evident that we had entered a far more gamey-looking country.

The hills on either hand were stony and steep, with ideal nullahs for ovis ammon between. A herd of these great sheep was indeed seen the next day, but they had obtained the wind of the camp and were very much on the alert, making it impossible to get near them. Where game is, there will wolves be found, and so it proved the following morning.

Having seen the baggage animals clear of the camping-ground, I started off with my orderly and a Tibetan guide to see what luck fortune had in store for me. We jogged along steadily over the sandy road for a mile or two, until a likely valley on our right was met with. Here we left the caravan track and entered the mountains, but had only proceeded a few yards when the guide spotted a wolf peering at us over the wall of a disused sheep-pen. The excited exclamations of the man soon drew my

attention, but several moments elapsed before I could make out what he had seen. Valuable time had been lost, but as soon as I knew what the animal was, we slipped off our ponies, and, creeping, rapidly up to the wall, peered cautiously over. The yellow-coloured thief (for they are terrible sheep-killers) was then some 250 yards away, slinking up the hillside. As our heads appeared above the crest of the wall, his curiosity got the better of his usual cunning, and he stopped to have a further look, fortunately for me with a dark green bush behind him. The rifle was on him in an instant, and though it was but a snapshot, luck was in this instance dead against him. I saw at once where the bullet had gone, through his ribs far back, for nothing else—except the final rush on his prey—would have made him move as he did. Like a streak of lightning, he crossed the ravine and breasted the hillside opposite. Never have I seen such speed in any animal, and hopeless indeed must be the chance of even the swift antelope when pursued by the relentless foe. But this one's evil days were numbered, for half way up the slope he faltered, broke into a walk, and after once turning round, lay down. I gave him a few minutes to breathe out his life, for I had no pity for him, and intended to leave nothing to chance. When we reached him, he was quite dead. He proved to be a splendid specimen of his tribe, and about six years of age. His russet-tinted hair was long and silky, and so closely set that no wind could penetrate to his skin, the removal of which proved a difficult and tiring process on account of the great cold, which quickly transformed the carcase into a lump of ice. When the operation was completed, the day was too far advanced to hope for any further sport.

As we cantered over the plain, goa were seen on all sides, but they were as wild as they could possibly be. Near Phari and Gyantse, these little animals are easily approached; for they are daily compelled to come into close contact with man, and familiarity has bred contempt, but in the more unfrequented parts there is no more difficult animal to get near, and consequently the sport they afford is of the highest class.

For two days, and for two days only, we passed through the Tibetan antelope country, and found them at this season of the year as easy to approach as the gazelle were difficult to stalk. Never do these antelope show any great anxiety to preserve their lives, but it is seldom that they pay no attention whatever to man. We had now, however, stumbled upon them in the rutting season, and they behaved more like common sheep than wild animals. Many thousands were passed during these two days, the does in this instance being four times as numerous as the bucks. The herds varied in numbers from six to twenty, and as each lot only acknowledged one master, it stands to reason that many promising bucks were left out in the cold. The position of lord of a herd appears to be an honourable and enviable one, if one may judge from the number of anxious suitors ready to take his place; but it is no sinecure, and the tenure of office must be of short duration, for no rest does he get day or night. As they were so ridiculously tame, we watched them for hours at a time at close quarters. No sooner was milord's back turned, than two or three suitors would jauntily approach from the opposite direction. Round the master would spring, and with blazing eyes, horns laid back and a deep-voiced roar, rush upon the most daring and chase him from the field. Woe betide

the laggard, for the needle-pointed horns would be buried deep into the fugitive's quarters. There was no play about it, for blood was seen to flow freely on several occasions. While this chase was going on, another buck would get amongst the fickle does. And so the game went on until he was beside himself with rage. Never a minute's peace did he get, chasing this one and then that, fighting the fiercest battles, receiving wounds and repaying them back with interest. His married life was not a happy one. Though perpetually at war, and apparently in the last stage of exhaustion, the victorious buck was always ready to meet all new-comers. The plain was covered with these merry honeymoons, and resounded with the roars of the angry husbands. In this blind state of rage, it can be understood how easy they were to shoot; not only did they not run away when we approached to within fifty or sixty yards, but looked as if they would even challenge man to mortal combat.

As to length of horns, these particular antelope were much of a muchness, all ranging between 24½ and 26 inches. It was not always the master of the herd who owned the longest horns, rather did he appear to have won his spurs by his pluck and the skill displayed in the use of his weapons. One very fine head of 27 inches was bagged by Bailey (and there might have been others of equal or even greater length), but as we could not carry away many trophies, and the camp only needed a limited supply of meat, the slaughter was not unduly prolonged.

Having obtained all the antelope required, our attention was once more turned to the search after ovis ammon. Between To and Dzing-ra, three herds were visible from the road, and here Bailey shot one ram carrying 40-inch horns.

This march was a long and tiring one, and no one felt inclined to go far from the road in search of sport, but the following morning I determined to devote entirely to an attempt to get a good ram. As soon as the baggage animals were clear of the camping-ground, I struck into the hills to the north, accompanied by my orderly. Entering a valley which ran parallel to the direction of our march, we found a country teeming with antelope and sand-grouse, and it was not long before a herd of ammon was observed high up in the hills to the north. These, with the aid of the glasses, were seen to consist of about forty females, but without a single male amongst them.

A careful scrutiny of the neighbouring ravines, however, disclosed two solitary rams, slowly moving towards the ewes and cropping at the tufts of grass on their way. Even with the help of the glasses, it was quite impossible to see whether they carried horns of sufficient size to make it worth while going out of our way. We got into a friendly ravine, and under cover of a bank approached to within half a mile. Both rams were now seen to possess fine horns. I longed to go straight up the valley; but this was out of the question, as it necessitated crossing an open space in full view, whilst the wind would also have been directly in my rear. The only possible chance lay in entering a neighbouring valley, climbing to the very top of the range, and then to come upon them from above.

The climb proved to be both a tedious and trying scramble over rocks, and occupied so much time that our chances of finding the ammon in the same place dwindled rapidly. On reaching the crest, nothing was to be seen; but as several parts of the valley remained hidden, I left my rifle on the ground and wormed my way to a projecting rock, from where a good view of

the whole nullah could be obtained. Then I realised the mistake I had made in not bringing the rifle with me, for within 80 yards, and facing downhill, was the whole herd of females. The rams had not yet joined them, and while puzzling as to where they were I saw, not 150 yards away, a great head slowly appear. There was now only one thing to be done, and that was to regain my rifle as quickly as possible. This took a good ten minutes to accomplish. Peering once more over the rock, I was disgusted to find that during this time the rams and the majority of the females had vanished. Three or four of the latter, however, were still grazing on the edge of a steep slope. The only possible course was to wait patiently, and this proved anything but a pleasant job in the bitter wind; but everything comes to him who waits, and the loiterers, after one last look round, vanished over the edge. After them I hastened, half running and half creeping. Still no signs; faster and faster I went, until distant about four yards and on the far side of a great boulder, motionless as the rock itself, I saw a massive pair of horns. From their position it was evident that the animal was facing me, and probably listening intently. I was standing upright at the time, and no boulders were at hand whereby I might gain another foot in height and have a snapshot at his chest. At moments such as this, one thinks of everything. I could not rush forward and fire with success, that was evident; the wind was in the right direction, so he had not winded me; neither had he seen me, for I had only caught a glimpse of the upper half of his horns, and these were far higher above his eyes than my cap was above mine. There remained one possible chance; so slowly sinking on my knees, and hardly breathing, I crept cautiously towards the

rock. There I waited a moment to regain my breath, and then, with the rifle to my shoulder and my finger on the trigger, rose to my feet. Alas! the animal had vanished. Was I ever to get the beast? Luck was apparently against me! Even now I thought a shot might be obtained at the herd as they raced away. Sliding and scrambling down the slope, I landed—right in the midst of the unsuspecting herd! All were on their feet in an instant, but I had eyes only for my ram, and before he could grasp the situation the rifle was on his ribs and the trigger had been pressed. In a cloud of dust and a clatter of stones, the whole lot once more vanished over the side of the hill—except my beauty. Not a quiver passed through the frame, for the bullet had reached his heart.

The rest of the herd appeared again about 150 yards off, with the smaller ram amongst them; but I had got all I wanted, and so let them depart in peace. The dead beast proved to be a beauty. He measured about 12 hands at the shoulder and carried a splendid pair of horns, though, as is usually the case, the points were much broken.

We, that is to say, the guide and myself, set to work at once to remove the head from the trunk, but the neck was so immense and the ground so difficult to stand upon that the task was almost more than we could accomplish. It was nearly dark before we had finished, but fortunately the caravan had made a short march, and the camp had been pitched only five miles away. I am afraid that, willing as the guide was, he must have hated the ammon's head, for it was no joke carrying such a weight down a steep hillside and over rough ground; but the pony was awaiting him in the plain, and with this assistance the distance was soon covered.

The head was half frozen by the time it reached

the tents, but the operation of removing the mask had to be begun immediately, for when once frozen this work is next to an impossibility. The new camp was situated at So, a place of but little importance, and presenting no feature of special interest.

During this march many herds of laden yaks were passed. They were travelling towards Lhasa, and were loaded with goor, dried apricots, and Indian piece goods. These, the attendants declared, were a portion of the taxes owing by the Gartok district to the Lhasa Government. An equal number of other small caravans were again met with on the following day, all laden with similar articles, so the good priests at the capital were not doing so badly.

Within a few miles of the camp the road left the banks of the Tsangpo and made a short cut up a valley to the north-west over an easy pass, again descending to the Brahmaputra Valley proper at a camp called Dzing-ra.

This stage was over twenty miles in length, and the going very heavy; but it was impossible to stop short of this distance, for no fresh water was to be found on the way.

Hira Singh, ever ready for professional work, had an opportunity of displaying his surgical skill during the march. Just before reaching the summit of the pass, two men were found on the side of the road. One of these, a poor old man, was moaning piteously and crying out for the doctor. He was quickly examined, and his case proved to be very serious.

While waiting for the medicine chests, the old man told his story, to the effect that he had fallen from his pony two days previously and broken his thigh bone. His servant had remained by him, but was quite unable to render any assistance or to move

him in any way. In this predicament he had here lain for forty-eight hours awaiting our arrival, for he had already heard that our caravan was approaching and that we had a doctor with us; Hira Singh's fame had spread far and wide. He was evidently afraid that we might pass by and leave him to his fate, and was profuse in his gratitude at the trouble Hira Singh took over setting the bone and bandaging him up. When all was finished, the patient was contented and happy; but he had to be left where he was for the present, and made as comfortable as possible with rugs and a supply of food beside him. It would have been worse than useless to have carried him on with us, so a yak-driver was sent back to Tra-dom with a message for the lamas to fetch him in. We heard nothing more of the poor old man, though Hira Singh anticipated a good recovery as long as his method of fixing the broken limb was not altered.

Dzing-ra turned out to be a miserable spot, situated on a small patch of grass watered by a tiny rivulet.

A glimpse of the Tsangpo was obtained, lying now far distant to the south, with immense sand dunes intervening between the different channels.

Two miles away rose a conspicuous rock, springing straight from the plain, its crest covered with the ruins of an old monastery, while close by a new one had been built, said to contain three monks. We did not visit it, as the external appearance was not particularly interesting, and our ponies had had as much work as they wanted.

Truk-sum was reached on 20th November. It is quite an important place in its way, for it boasts of a stone house containing seven rooms, in addition to a large collection of permanent tents. No dzongpon

resides here, as we had been led to expect from Pundit Nain Singh's report.

As the altitude of the country gradually increased, the cold became more and more intense, snow falling lightly at intervals. The bitter wind, which began to blow at ten o'clock and which daily increased in violence, penetrated our clothes like sieves. Once away from camp on the day's march, the chief discomfort vanished, for in the rarefied air in which we were then living, the effort of walking fast made the blood course with redoubled vigour through our veins.

The whole party, Europeans and natives alike, wore beards on which the breath soon froze, and our faces within a few minutes of leaving camp became encrusted with ice, which it was impossible to get rid of at the time, and which effectually put a stop to all further conversation. Here the Tibetans had the advantage of us, for they can grow no hair on their faces. It would have been better in some ways had we become like them and shaved.

If we in the plains were cold, the trials which Ryder and Wood endured can well be imagined, as they were engaged for hours at a time at their survey work on the summits of the mountains.

CHAPTER IX

HOLY MANASAROWAR

THE river near Truksum, on the banks of which our next camp was pitched, is a stream of considerable size, having a width of 150 feet. Probably during the rainy season it overflows its banks, but even in this state would be fordable in places. Now it formed a solid sheet of ice, so slippery that gravel had to be thrown on its surface before the ponies could attempt a crossing.

This camp had but little to recommend it, for there was no grass and but little fuel, and it was not to be wondered at that no herds of yaks or goats were anywhere near. How different it was from the scenes daily witnessed during the previous fortnight! Between Sa-ka Dzong and Truk-sum especially, immense herds of yaks were seen grazing in all directions, sometimes in the plain and at others high up the neighbouring valleys, and never a day went by without our passing on the road great flocks of sheep, often numbering two thousand or more.

With the exception of the staging bungalows, no houses are to be seen; for to build a house timber is a necessity, and not a tree exists within 100 miles or so of the place. On the low-lying ground and in the sheltered nullahs where grass is plentiful, wandering bands of nomads have taken up their abodes, living in strange yak-hair tents, and with nothing in the world to do but tend their herds.



A Religious Mendicant.



Beggars.


OF
IFORNIA

These tents present many advantages over more stable habitations; for they cost but little, are quickly erected, and easily moved from one place to another. They keep out the whole of the rain and snow, and what is more remarkable, considering how loosely the yaks' hair is woven, the wind also. The size depends upon the numbers of the family it is required to cover; for the living-room, dining-room, bedroom, and kitchen are all rolled into one, the ground immediately outside being used as a scullery, and here all refuse is dumped down in one evil-smelling heap.

The people were most deferential, one might almost say cringing in their manner, not only removing their caps and putting out their tongues to their fullest extent, as respect demands, but also gently scratching the back of one ear, as an indication that they were listening intently. This latter action as a novelty was amusing enough, but when it came to be repeated fifty times a day in the person of Lodu the interpreter, it speedily became irritating in the extreme.

The dearth of children was very noticeable, and only on one or two occasions did we, in the uplands, see a baby. No young girls were ever visible, and only a few women and boys, out of all proportion to the number of men.

These nomads were a wild, unkempt, dirty-looking lot, their long matted hair hanging in rolls or filthy pigtails down their backs, or blowing out in streamers in the wind. Uncivilised as their outward appearance led one to believe, yet they proved delightful people to work with. No task was too hard, and no march too long. The yak-drivers with piercing whistles drove their yaks before them from early morning till late at night, and this was anything but an easy business. Two men tended twenty yaks and did all the loading

between them, this operation necessitating repetition, during a march, over and over again; for the packages were always slipping or being knocked off by other yaks. To load one animal, a general halt has to be called, for no self-respecting yak will allow himself to be handled quietly unless he is with his fellows. When once off on their way, however, they are excellent beasts of burden, especially in the late autumn months, when they are in prime condition and rolling in fat, on which the poor beasts have to exist until spring comes round again, and with it new grass.

The next day we left for Nak-chak, distant about 18½ miles, and in the absence of any clearly defined road the caravan made its way across country covered with grassy mounds, which proved more than trying to the laden ponies. Towards the end of the journey matters improved, as many parallel paths led across the plain to the new camping-ground. This was situated on the banks of the Tsangpo, now so diminished in size as to be fordable, with ease, at all seasons of the year.

From Nak-chak we made our way through Laktsang to Rajen, about which place the less said the better. The whole country was enveloped in snow, and no grazing was procurable for the ponies; to make matters worse, not only was the usual supply of grass, which had been previously daily brought in by the Tibetans, not forthcoming, but water was only procurable from a small spring, the overflow of which disappeared almost immediately into the gravelly soil. The only interesting feature in connection with the place was a deserted and ruined monastery, situated on a rocky spur about four miles to the north-east.

This proved to be our last day amongst the plains of the Brahmaputra, for all that now remained of the

great river were numerous channels, which in the rainy season drained the neighbouring hills. The main tributary lay to the south, and obviously terminated in a similar manner. The night was bitterly cold, the thermometer registering 51 degrees of frost.

From here we had anticipated difficult travelling, for we had entered the mountains, and expected to find the ascent of the famous Ma-yum La, the pass which separates the Brahmaputra Valley from the Mana-sarowar Lake district, both rough and steep. The pathway, however, was clearly defined, and the miles which lay between Rajen and the summit of the pass offered no impediment to our passage, as we travelled along a gentle slope, the whole way.

A heap of stones, roughly five or six feet high, consisting of many thousands of white quartz pebbles, crowned the summit of the pass. Several smaller piles were situated close by, and from each of these a string passed to the main collection and carried countless rags, the majority of which were white and bore printed prayers. The weary pilgrim passing on his way was ever happy in the thought that his contribution was acceptable to the gods, and that prayers were being continuously offered up as the rags fluttered in the wind. In addition, there was a motley collection of ovis ammon and other horns, picked up on the road and deposited there by the traveller.

The view obtained from the summit was disappointing, for the pass was shut in on all sides by rounded mountains.

The slope on the western side was easy, and so the animals rapidly covered the four miles which intervened before the camp was reached. This was situated on a sheltered flat at the mouth of the ravine and on the edge of a plain, the centre of which was occupied by

the lake of Gün-chu. This place, Lu-lung by name, turned out to be a Government stage, but it differed from those already passed in that there was no stone building, the man in charge having to live throughout the year in a tent — not a very comfortable habitation during the bitter winter months. Gün-chu Tso has obviously diminished in size within comparatively recent years, for about ten square miles of excellent grazing-ground lies at the eastern end. This area is almost flush with the level of the water, and in summer forms a dangerous quagmire.

Many hundreds of yaks were roaming in all directions, whilst a hundred or more, which had been driven in close to the camp, were ready for the next day's march.

Just before reaching camp, three good ovis ammon rams were seen within half a mile of the road, but they did not like the look of the ponies and men, so moved away. Bailey and I followed, but their walk was too fast for us to cut them off, and the chase was abandoned as soon as they disappeared round a bend into a neighbouring nullah. Gün-chu Tso, along the shores of which we travelled, was entirely frozen over, and the ice of sufficient thickness to bear laden animals; this surprised us, for the Tibetans stated that the waters were bitterly salt, and this is more than probable, as there is no outlet. During the summer rains, and when the snows are melting, the lake steadily rises, but never to a sufficient height to drain into any other lake system.

A barren range lies to the south, at the far end of which, Mémo, an immense mass of rock over 22,000 feet in height, lifts its head proudly to the skies, the western face rising almost perpendicularly from the margin of the lake. On account of its great height, it

is visible from many parts of the Himalayas, and even from the Shipki frontier, and so forms an excellent mark upon which to steer.

At Uk-rung, a camping-ground half way along the northern side of the lake, we expected to find an old staging-house, visited by the Pundit Nain Singh in 1865; no ruins, however, are now to be seen, and not one stone remains upon another to indicate its original position. Two marches brought us to Tok-chen, the second stage covering a distance of 22½ miles. During the first and last part of the journey the road was quite good, but the many intermediate miles led us across a spur, and proved terribly trying for the tired ponies. The rounded boulders, covered as they are with loose sand, must cause much difficulty for transport animals at any time, but when in addition the whole is concealed by two inches of soft snow, as was the case when we were there, nothing in the world takes the spirit out of man and beast more quickly.

The grand little ponies, fully laden as usual, were utterly worn out on reaching camp, too tired even to munch their scanty dinner of grass.

It was almost dark when we arrived, but what a haven of rest and what a delightful spot it looked, with the fires crackling away, and fresh, willing men only too eager to make one comfortable and rub down the ponies! As soon as the animals were unladen and rugged up for the night, everybody turned their attention to the steaming cups of tea awaiting them. At such times tea takes precedence over everything else, even the pitching of the tents.

Bailey arrived after dark, having been detained by a chance encounter with a black wolf, which he had shot and brought into camp. The shoot was such an interesting one that I will give an account of it.

The wolf was first sighted crossing the road some distance ahead, but as it was moving at a trot and showed no inclination to stop, Bailey was forced to take a running shot. The bullet, however, was placed too far back to kill the beast outright, for, though hard hit and rolled over, it quickly recovered and took to the hills to the north. A long and stubborn chase now commenced, Bailey's good old one-eyed pony travelling for all he was worth. At times only a few feet separated pursued and pursuer, and then the former would put on a sudden spurt and leave the pony almost standing. The pace soon began to tell on both, and the wolf, exhausted by its efforts and weakened by loss of blood, finally turned to bay. On Bailey dismounting, the animal made no attempt to come to close quarters, but sat on its haunches a few feet distant, snarling and snapping, until a bullet through the chest quickly put an end to its wicked existence. The day was too far advanced to start the operation of skinning on the spot, so the carcase had to be placed on the saddle in front of the rider and carried into camp, by no means an easy job.

Tok-chen turned out to be a very pleasant spot, and had we visited it earlier in the year, should have halted at any rate for one day, in order to explore the country. A fine stream, now entirely frozen over, flowed down the centre of the valley, but water was easily obtainable on breaking the ice. The people declare that it never freezes solid, so possibly it has its source in a warm spring some little distance up the valley. The grazing is excellent, and fuel, in the form of prickly shrub, plentiful.

At dinner that night, Ka Sang brought in bowls of junket, very similar to, but slightly sourer than the English dish. When sweetened with sugar it is most

palatable, and so much was it appreciated that we were given it every night afterwards as far as Gartok, after which place the supply of milk failed.

A few miles beyond Tok-chen the first view of Manasarowar Lake burst upon us. This sheet of water had been eagerly expected for several days by everyone in the party, but particularly by the Hindus and Buddhists, for it meant much to them, and even a sight of the holy lake was sufficient to wash away countless sins. Le-gya Camp was not over two miles from the shore, but such is the effect of continual marching that none felt inclined to go to the lake itself and bathe in, drink, or even examine the water; but this did not prevent us from finding out many interesting facts connected with it.

Kailas Parbat, or Peak, situated a few miles to the north-west, and Manasarowar are two of the most interesting spots in Tibet, and will in time become to Hindus as important a place of pilgrimage as Mecca is to Mahomedans. Both deserve a fuller description than I can possibly give, for we were only able to reach the lake once, and to examine the mountain from the road, but even then much of interest was revealed. Manasarowar, for so it is known to the natives of India, is called simply Tso Rimpoché (Sacred Lake) by the Tibetans. Within a radius of a few miles rise four of the greatest rivers of India—the Indus, the Brahmaputra, the Sutlej, and the Ganges, the two former of which almost girdle India.

Manasarowar has an area of about 100 square miles, is nearly square in shape, and presents a very regular outline. The water is fresh, and in it are many varieties of weeds, and, as is to be expected, innumerable fish. It is fed by numerous small streams running from the Mémo and Kailas Peak ranges, but by no river

of importance. A very interesting fact was noticed, for when seen on December 1st, though the cold was intense, the surface of the lake was only frozen for 100 yards or so from the edge, the centre being quite clear and free from ice. This was all the more peculiar and unexpected, after having found Gün-chu Tso, an extremely salt lake, frozen over from shore to shore to a depth of several inches. Two explanations are possible: either the lake is of excessive depth, or else it is fed by hot springs. That hot springs do exist was proved beyond doubt, for Ryder and Wood found one in the channel to the west, and others are reported to exist at the foot of Kailas Peak.

We were enabled to solve an interesting geographical problem, one which has puzzled scientists for many years, and that was the question as to whether Manasarowar finds an outlet for its surplus water or not. To the west of the lake, and separating it from Rakas Tal, is a narrow isthmus, and it was through a channel at its northern end that the water was said to run.

Captain H. Strachey, during the first week of October 1846, traversed this strip of land. He was then on his return journey, and declares that he came upon a

> "large stream 100 feet wide and 3 feet deep, running rapidly from east to west through a well-defined channel; this was the outlet of Manasarowar."

He then goes on to state that this stream, after winding through the undulating ground of the isthmus for perhaps four miles, falls into Rakas Tal. Coming from such a reliable authority this should have been sufficient proof, but some writers still doubted its existence, and Mr. Savage Landor claims to have proved, a few years

ago, that no passage exists, and remarks, in the book of his travels,

"it was my good fortune to make quite sure from many points that, as can be seen from the illustration reproduced in these pages, the ridge between the Rakas and Manasarowar Lakes is continuous, and no communication between the two lakes exists. With the exception of a small depression about half way across, the ridge has an average height of 1000 feet all along. . . . The lowest point in this depression is over 300 feet above the level of the lake."

This again seems clear enough, and in order to settle this vexed question, Ryder, Wood, and Bailey made a long round from Nak-luk-ru to Barkha, as a result of which, Ryder reports in the *Royal Geographical Journal* as follows :—

"Skirting the lake, we rode across the low hills, which close in on the western side, to look for the outlet, which Moorcroft had not been able to find, which Strachey had found, and which Mr. Savage Landor had claimed to have discovered did not exist. We struck the channel a mile below the outlet, a small stream only partly frozen over; this we followed up, and found that it did not flow from the lake, but from a hot spring, at which we found and shot some mallard. We then followed the dry nullah to the lake, and proved that Strachey was, as was to be expected, quite correct. No water was flowing at this time of the year, but the local Tibetans all agreed that for some months in each year there was a flow during the rainy season and the melting of the snows, *i.e.*, about from June to September. As a rise of about two feet in the level of the lake would cause water to flow down the channel, this appears quite worthy of belief. The length of the channel between the two lakes is about three miles."

Personally, I neither visited the lake nor passed along the ridge, which I could, however, see distinctly from end to end, and I very much doubt whether the highest point exceeds 300 feet. At the entrance of the channel, and situated on a mass of rock, is a small whitewashed monastery, occupied by four monks, and other temples are to be found in sheltered spots near by.

In the channel itself rises a hot spring; the warmth given off had been sufficiently grateful and comforting to induce six mallard to discontinue their journey to the plains of India. Their dilatory tactics proved rather an unfortunate matter, for two were bagged for our evening meal, the remainder rapidly continuing their road to the south. A little lower down the stream, great quantities of fish, torpid with the cold, could be seen through the ice, which, however, was of too great a thickness to be broken, and we were consequently deprived of still another dish.

Ram Singh accompanied Ryder in this excursion, and combined business with pleasure by bringing back to camp six bottles of the sacred lake water. This, in due time, found its way to Dehra Dun, and was without doubt doled out in small quantities to his admiring and envious relations. This success made the Hindu cooks so extremely jealous that a little of the water had to be given to them also, and this they carefully sealed up in small medicine bottles, afterwards hiding it away in the secret recesses of their bedding; altogether the expedition proved most satisfactory to all concerned.

The last view of Manasarowar Lake was obtained from a prominent rock, situated at the northern end of the isthmus, and close by the camping-ground of Nak-luk-ru. From this point of vantage, the country far to the south could be distinctly seen. Between the southern shore of Manasarowar and the Himalayas lies the great triangular plain of Pu-rang, and here the Karnali River, a tributary of the Ganges, has its source. Much as we wished to visit the town of Pu-rang (known to the natives of India as Taklakot), yet it was impossible to do so, for the Tibetans declared that snow might commence to fall heavily any day now, and that if it once started in earnest, then good-



CHANNEL BETWEEN MANASAROWAR AND RAKAS TAL



KAILAS PARBAT, THE SACRED MOUNTAIN.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

bye to all chances of crossing the passes beyond Gartok this winter.

Pu-rang is the largest town in Western Tibet, and as far as we could make out from the nomads, consists of a large monastery, containing some two hundred monks, and four hundred houses, the majority of the dwellings being dotted about the plain and along the banks of the river. The surrounding districts are fertile, and produce as much grain as the natives require for themselves, but not sufficient for export as well.

Of all places in Tibet, it is the easiest to reach from India; for the lowest passes in the Western Himalayas lie between 15 and 25 miles distant in a southerly direction, and the three best known can be reached from Almora—the Lipu Likh, 16,750 feet high, *viâ* the Kali River; the Untadhaura, 17,590 feet, *viâ* Milam; and the Niti La, 17,000 feet.

The Lipu Likh is the most popular, for the roads onward to Pu-rang are reported to be in fair condition, though but little is in reality known about them, for on only two occasions have Europeans visited the town, and in each case the traveller received a hostile reception.

Pu-rang is also historically interesting, for here the Tibetans, assisted by the Chinese, in 1841 fought their most famous battle, and completely defeated the Dogra army sent by Raja Ranbir Singh of Kashmir, under the command of the famous General, Zarawar Singh. It is hardly remembered by historians, but to the Tibetans it is a never-to-be-forgotten victory.

Zarawar Singh, flushed with success after his brilliant and victorious campaigns in Baltistan, Zanskar, and Ladak, determined to conquer Tibet and add the whole of this great country to the dominions of his

master. The fortress of Rudok surrendered without a struggle, and was completely sacked, after which the force advanced by detachments up the Sutlej and Indus Valleys. Tooling and other villages were occupied, but transport was scarce and the commissariat arrangements primitive, and months consequently passed before the troops were fit to move again. In the council of officers which the General called to discuss the situation, all were unanimous in deprecating an advance in the present condition of affairs. The Dogra General, however, had made up his mind on the venture, and, overruling all objections, ordered a general advance to be made on Pu-rang. The winter had been an unusually severe one, and the troops had suffered terribly from the cold; at least one-third of the soldiery were frost-bitten and disabled, and sickness was rampant. General Zarawar Singh believing that his troops were invincible, on receiving information of the advance of a great army of Chinese and Tibetans, sent forward two hundred of his six thousand men to meet them. This advanced guard was almost completely annihilated. On hearing of this reverse, a second party of six hundred was despatched, only to suffer a like fate. Undismayed by these disasters, Zarawar Singh concentrated his troops, and, placing himself at their head, advanced with the whole of his force to Tirthapuri, and from thence to Pu-rang. The night before the battle, the cold became so intense that the troops were incapable of movement, and in order to obtain a little warmth, burnt the stocks of their guns. In this helpless condition the Dogra army was attacked by the whole Chinese and Tibetan forces early the following morning, and completely defeated. Zarawar Singh, a man of indomitable courage, endeavoured by reckless bravery to instil some ardour into his men, but

with no effect. He was finally lassoed, dragged from his horse and decapitated, his head being subsequently carried in triumph to Lhasa, where it is still preserved. The victory was complete. Immense numbers of prisoners were taken, tortured and executed, the miserable remnants of the Dogra army, 120 in number, finding their way back to India over the Niti Pass, after having endured the greatest hardships. Many years have passed since then, but the memory of the battle is ever green in the minds of the Tibetans, and the halo that surrounds it certainly accounts not only for the great belief every Tibetan has in his own prowess, but also for the indomitable bravery they often showed in the Gyantse Valley last year.

CHAPTER X

PECULIAR CUSTOMS

A SHORT march the following morning through low scrub jungle, swarming with hares, brought us to the important station of Barkha. The houses are invisible from the east until the traveller arrives to within 200 yards of the place, for it nestles close under the sand mounds which lie to the north of Rakas Tal. There are only two stone buildings; the larger the hostelry proper; the smaller and less pretentious one being utilised by the official in charge. The stage-house is excellent in its way, forming three sides of the square and containing nine rooms. The whole place had been swept up and cleaned, though, in spite of these efforts to render the rooms presentable, a considerable amount of dirt was everywhere visible. It looked cheerful, however, for the smoke-begrimed walls were covered with Manchester and Indian cotton prints, which, though only partially concealing the dirt, created an impression of comfort and showed what efforts had been made to afford a welcome. The ta-sam official, a pleasant old man holding the rank of dzongpon, was waiting at the head of a retinue of attendants, and ushered us into an inner courtyard, from which a few rooms opened out, and in one of which tea and sweets had been got ready.

Piles of Chinese brick tea and bales of sugar were stacked in the various corners, representing either the

rewards of the dzongpon's commercial activity or the percentage received as his due from the traders passing through.

These "bricks" weigh about 4¾ lb., and are wrapped in gold paper, presumably with the object of deluding the purchaser with the idea that the contents are of a very superior quality, though in reality the tea is of the coarsest description.

Though considered good enough to press into blocks, and export into Tibet, the "bricks" actually represent the leavings and sweepings of the Chinese tea crop. The leaves are picked from the oldest and worst trees, and freely mixed with the stalks and odd fragments of wood. The price, in spite of these failings, is very high in Western Tibet, the most inferior quality costing 1s. 4d. per pound, and the better brand 2s. 6d.

Tibetans are probably the greatest tea-drinking race in the world, and most of their earnings must be spent in the purchase of this beverage. Indian tea is a drug in the market; the reason is not easy to trace, though the idea generally prevails that it produces bad headaches. This superstition probably originates from the reports of the wily Chinese merchant, who is naturally desirous of keeping the Indian article out of the market.

Many nomads from the surrounding country had been called in to assist our party in settling down for the night, and these had pitched their tents around the houses and along the banks of the stream which flowed past the camp. They stared open-mouthed, and evidently regarded us with considerable awe, for the news of the fighting at Gyantse and the entry into Lhasa had penetrated into these distant regions, and we may be sure that the stories had lost nothing in the telling.

They were a cheerful, good-tempered lot, tumbling over one another in their excitement as soon as the baggage animals arrived, throwing themselves eagerly into the work of unloading the yaks, fetching food and water and unpacking the tents. The general effect our arrival produced bore a strong resemblance to the wonder and eager anticipation evinced by the children of an English village at the arrival of a travelling menagerie.

In an incredibly short space of time all were comfortably settled down for the day, the ponies picketed and rugged-up, while, round the crackling scrub-wood fires, Tibetans and Indians alike sipped away at their respective but equally beloved brands of tea.

No time was ever lost in searching for tea-cups, as each man invariably carried his own, the natives of India utilising enamelled iron mugs, and the Tibetans small polished wooden bowls, often mounted in silver. The iron mugs were generally cleaned by being wiped on any convenient coat-tail, whilst the wooden bowls were carefully and thoroughly licked by the owner's long and pliant tongue, after which operation they vanished, till next required, into some hidden fold of the voluminous cloak.

Barkha figures conspicuously in most of the larger maps of Tibet, for, though the buildings are insignificant, yet the place is in reality of considerable importance, from the fact that it lies at the junction of many roads. Lhasa to the east, Pu-rang to the south, Tooling and the Sutlej Valley to the south-west, and Gartok to the north-west, all intercommunicate at Barkha.

During the summer months, one of the most important trade-marts is held here, merchants from India collecting in goodly numbers to barter with the

nomads their respective merchandise. The first arrivals at these fairs naturally choose the most favoured sites, whilst those who had been delayed on the journey have to occupy any available spot that may remain. All, however, collect together, and the plain is consequently dotted with tents of all shapes and sizes, whilst great herds of yaks, goats and sheep wander over the rich pasture lands.

At this time the dzongpon is undoubtedly quite in his element, administering justice, collecting dues and transacting business on his own account. To these trade-gatherings Tibetans flock in large numbers to dispose of wool, *pashm* (the fine underwool of a certain breed of goats), and anything they may have collected during the preceding twelve months, spending their earnings in the purchase of pots and pans, Indian cloth, knives, and the various odds and ends so universally precious to nomads of all races.

Very little money changes hands in these transactions, but the Indian rupee is so popular amongst Tibetans that anyone well provided in this respect can drive excellent bargains. The rupee a few years ago was so sought after that many merchants simply brought silver into the country, exchanging the coin for gold dust and reaping very large profits on each journey. Latterly it has fallen in value, but even now will buy more than its equivalent exchange in "tunkas," the silver coin in general use throughout Tibet.

A "tunka" is about the size of a shilling, but so thin that it is valued at sixpence. They are struck at Lhasa, and, though varying considerably in design, all have on one side the sacred signs of the Buddhist religion.

It will be readily understood that the mixed circulation of rupees and tunkas not infrequently causes

trouble in buying and selling, for, though one tunka is equal to sixpence, three tunkas go to a rupee, which is worth one shilling and fourpence. Still other difficulties arise, for in the Tibetan coinage there is no small change. The laws relating to defacement of money are not stringent, and so the difficulty is got rid of by cutting the tunka into three parts, each of which the operator endeavours to palm off as half a tunka and equal to threepence. As every tunka is also clipped round the margin, the popularity of the Indian rupee is obvious.

Whilst on this subject, one other point of interest must be mentioned, and that is that the natives prefer the rupees of the old East India Company to all others; next to these come the older coins of Queen Victoria, whilst the least popular are the last issue of the late Queen's reign and those of King Edward VII. This peculiarity is due to the fact that, though the weight is the same, the rupee has steadily diminished in diameter.

CHAPTER XI

THE HOME OF THE GODS

BARKHA is but a short distance from the northern shore of Rakas Tal, a long narrow sheet of water which runs north and south, receives the surplus water of Manasarowar Lake, and is, as far as could be seen, devoid of islands.

Many have supposed that the Sutlej runs from this lake, and as Rakas Tal and Manasarowar are connected, it stands to reason that the Sutlej would actually originate in one of the streams that run into Manasarowar Lake. To settle the question as to whether such was the case or not, Ryder and I set out at dawn the following morning with two local guides. We travelled firstly in a southerly direction, in search of the channel, and this was eventually found some two miles farther away than anticipated. The passage was broad and dry, and the level of the lake many feet below the bed of the channel.

It was evident that no water had flowed from Rakas Tal down the passage for a considerable time, but there was nothing here to prove that such might not be the case during the melting of the snows in an exceptionally wet season. The guides and the shepherd, whom we met, stated that no water at the present time ever flows out of Rakas Tal, but added that during the Nepal War, about fifty years previously, the overflow took place annually. To make

quite sure, we entered the channel and moved along it in a westerly direction. At places the bed widened considerably, and the dry ground was covered with a thick incrustation of salt: such would not have been the case had water flowed over it during the last few years. When five miles distant from the shore, we obtained from the sand-marks in the bed of the stream conclusive proof that the Sutlej rises a few miles to the west of the lake, for their arrangement indicated that at one place the rain water, draining from the adjacent hills, runs eastwards towards Rakas Tal, whilst a little farther on, other streams entering the channel flow in a westerly direction and form the source of a river. Rakas Tal, like most Tibetan lakes, is said to be steadily diminishing in volume, and it is therefore more than probable that this sheet of water will never again overflow into the channel of the Sutlej.

In our anxiety to settle this question, we had ridden farther and farther from the road taken by the caravan. The general position of our new camp was well known to our guides, but the most direct path was a much more difficult question to solve, and to make matters worse, the ponies began to show signs of exhaustion. The wretched little animals ridden by the Tibetans were old and thin, and got over the ground even more slowly than our own. In order to save their strength, we all dismounted and dragged our steeds behind us, a tiring and slow performance over ground uneven and thickly strewn with boulders. We had visions of being kept out all night, but fortunately caught sight of the last drove of baggage yaks, which had also experienced much trouble on the road and been delayed many hours. They were five miles away and travelling in the

same direction as ourselves, so the ponies were again mounted and urged on at a canter, the long walk apparently having put new life into them, and, rattling away downhill, camp was reached before dusk.

Our own party had covered thirty-four miles, whilst the caravan had done over twenty, and everyone was tired out and in need of immediate rest; this, however, was out of the question for the present, as, although water was plentiful, both fuel and grass were exceedingly scarce. Latterly the amount of dried grass supplied at each camp had been getting less and less, for Tibetans stock but very little at their rest-houses and none at all at the intermediate stages. None but Tibetan ponies would have existed in this country with such hard work and wretched food, for the little beasts seemed to thrive on practically nothing. To assist in the scanty supply of fodder, they were not only turned loose immediately on arrival in camp, but were also driven along the road in twos and threes, in order that they might pick up a few blades of grass as they moved along.

We had been particularly lucky in our animals, for they were a good-natured and well-mannered lot, easy to load and drive, and giving no trouble either in collecting from the grazing-ground or picketing at night. The poor little beasts were, however, usually too tired to think of fighting amongst themselves, or to gallop of their own free will about the country.

I have intentionally said nothing up to the present about Kailas Peak, for though it had been visible for several days past, yet it was only during this march that we actually passed it, and were enabled to scan its perfect proportions at close quarters. Unfortunately no photograph was taken on this day, and there is

no other illustration of it but that taken from above Nak-luk-ru.

Kailas Parbat is by far the largest and highest of the many pinnacles that tower up in the sky from the range of mountains which lies to the north of the Manasarowar Lake; its summit rises over 22,000 feet above sea-level, or some 7000 feet above the surrounding plain. Figures, as a rule, convey but a vague idea to the general mind, and it is indeed difficult to place before the mental vision a true picture of this most beautiful mountain.

In shape it resembles a vast cathedral, the roof of which, rising to a ridge in the centre, is otherwise regular in outline and covered with eternal snow. Below this so-called roof, the sides of the mountain are perpendicular and fall sheer for hundreds of feet, the strata horizontal, the layers of stone varying slightly in colour, and the dividing lines showing up clear and distinct. These layers are again divided or split by perpendicular cracks, which give to the entire mountain the appearance of having been built by giant hands, of huge blocks of reddish stone.

At the foot of these Titanic walls a number of caves are said to exist, and dark and gloomy ravines lie on either side, while from the neighbouring and lesser hills rise numberless pinnacles and slender spires of rock.

Wonderful is the appearance of this mountain in the early morning, when its roof of spotless snow is touched by the rising sun and changed in hue to a soft but vivid pink, whilst the ravines below still hold the blackness of the night. As the light increases so do the mighty walls brighten in colour, and form a happy contrast to the blue waters of Manasarowar rippling in the morning breeze, changing

gradually, as one gazes, from purple to brightest blue.

No wonder, then, that this spot is believed by Hindus and Mahomedans alike to be the home of all the gods, that of the waters of its lake they drink, and that in its unexplored caverns they dwell; to them it is *the* Holy Mountain, and the most sacred spot on earth, a pilgrimage to which ensures both sanctity and renown.

A track completely encircles the base of the mountain, always difficult and at one place rising to a great height. Along this path the pilgrim wends his weary way.

Walking at the usual speed, this takes about three days to accomplish, but a pilgrim travelling in this manner gains but ordinary merit, rather should he dawdle along, immersed in sacred thought and meditating on the goodness of the gods. But the holiest of all ways is for the pilgrim to take three weeks in the process, measuring his length upon the ground every few feet, until, after many thousands of these prostrations, the round is completed and the highest sanctity attained. At one point along the path, Gauri Kund is reached, a lake, so report goes, that remains frozen at all seasons of the year, its icy waters never yielding to the genial rays of the sun. Here the pilgrim is expected to break the ice and immerse his weary limbs, though all but the most devout content themselves with merely putting a little water on their heads.

Alongside this road, at regular intervals, many small monasteries have been built by monks, for the twofold purpose of giving shelter and food to the pious, and of obtaining by their offerings a living for themselves.

Darchan, the most important of these *gompas* (monasteries), is a whitewashed building situated above the plain on the southern slopes of the mountain. A splendid view can be obtained from this place, for it overlooks Manasarowar and Pu-rang Plain, right up to the summit of the distant Himalayas. The inhabitants are under the control of no dzongpon, nor are they responsible to the Garpons of Gartok, but communicate their desires and grievances direct to the Lhasa authorities.

Although Kailas Parbat was passed on December 3rd, yet very little snow had fallen, and our march had been nowhere delayed, a fact which clearly showed to the superstitious Tibetans that the gods were smiling on our travels and assisting us in every possible way.

From Barkha onwards, the country becomes still more barren and desolate. Grass undoubtedly grows in great profusion during the summer months, though at the time of our visit it was all dead and withered, herds of goats picking up here and there scanty sustenance on the shrivelled blades. As grass decreased in quantity so the prickly shrub proportionately increased, covering the lower slopes of the mountains and the hollows in the plains, and growing at times in such profusion as to almost obliterate the track. The hares, which had been previously seen scurrying from bush to bush or peering over every tuft of grass as the caravan wandered in and out of the hillocks, were now no longer visible.

As far as we could tell, antelope and gazelle were non-existent, but game in some form or other must have been plentiful, for wolves became more and more numerous, and not a day passed but three or more of these beasts were seen near the road. The



YAK DRIVERS.



YAKS ARRIVING IN CAMP.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

red variety gave place to the black, but they were far too cunning to give us another chance, even at a long range! Small herds of yaks were occasionally seen wending their way to lower ground where grazing prospects were more promising, and flocks of sheep and goats eked out a precarious existence in all the more sheltered valleys.

The valuable pashm, or silken underwool, is obtained from these goats during the spring and summer months, the animals spending the winter in the highest altitudes, in order that the wool may be as thick and profuse as possible. Pashm, though greatly appreciated by the Tibetans for the manufacture of their underclothing, is in such request by the merchants of Srinagar and Amritsar for the manufacture of the famous Kashmir and "ring" shawls that the demand is always greater than the supply, and the price rises enormously before it reaches its destination. The Tibetans themselves rarely bring the wool to Kashmir or India, this being done by many hundreds of Ladakis and men of the Hill States, who visit the fairs annually and carry back their purchases in little saddle-bags strapped on the backs of sheep.

The largest flocks of sheep and goats were encountered in the ravine of Trok-poh-shar, where a halt was made on the second night after leaving Barkha. The valley was so sheltered from the bitter winds that the stream which ran down the centre was only partially frozen, and grass, still retaining a vestige of green, was still growing on both banks. Here innumerable sand-grouse had taken up their abode, and though their tameness was such that sporting shots were out of the question, yet they afforded a very welcome addition to our table, as we had seen no game-birds for the past three weeks, and were

simply longing for a change of diet. Luxuries had long since vanished from our daily menu, and the diet consisted now almost entirely of sheep, flour, potatoes, tea and rancid butter, with now and again a spoonful of jam as a special treat. The store of whisky, never very large, had long since been exhausted, and with it departed much of the conviviality that had hitherto characterised our after-dinner conversation.

Time, consequently, hung rather heavily on our hands, until one genial spirit, more daring than the rest, proposed "Bridge." This was at first eagerly grasped at, but the experiment proved a lamentable failure on account of the intense cold. At the best of times, it was a difficult matter to keep one's hands warm, and resource was frequently had to our pockets. This position was not adapted to rapidity and accuracy of play, and it can be easily understood that the post of "dummy" was eagerly sought after. Considering also that the game was carried on by the dim flickering light of one smoking candle, the conclusion was soon unanimously arrived at that "the game was not worth the candle," and so we retired at an early hour to our fairly-warm beds.

On December 5th we reached the relay station of Misar, situated on the banks of the Sutlej. Here the river makes a sharp bend to the south for a few miles, and then again turns west, continuing along the south side of the mountainous range which runs past Gartok into Ladak.

Though Misar is in reality a place of some importance, it only boasts two main buildings, but these have been added to from time to time, as the population increased. Each new out-house has been erected where most convenient, a shapeless mass resulting,

cut up into sections by narrow, noisome passages. Dirt reigned supreme, and as most of the rooms possessed no doors, they were horribly cold and draughty. Ancient and evil-smelling pieces of canvas partially covered the numerous holes in the walls and flapped noisily in the wind; altogether the conditions were so unpleasant, that it would have been infinitely preferable could we have pitched our tents on the banks of the stream, but this would have added considerably to the men's work, and it was our object to save them as much labour as possible, for the drivers were showing unmistakable signs of fatigue. Two of the natives of India were frost-bitten in the feet, but, thanks to Hira Singh's promptness, neither of them lost their toes, and both eventually recovered sufficiently to walk into Simla.

From Barkha, the easiest road to India apparently ran along the bank of the Sutlej, and it was by this road that we had previously determined to send all the ponies and the heavy baggage under the care of Ram Singh. The natives of Misar, however, reported so badly on the condition of this route that we now decided to take the ponies along with us, and only send Ram Singh and a military surveyor, with hired yaks, by the river route. They received instructions from Ryder to survey as much of the country to the south as they possibly could, and finally make their way to Tooling, there to await our arrival.

The next morning we parted company from Ram Singh and his little caravan, striking north-west towards Gartok.

The ascent of the Jerka La, the pass separating the Gartok and Misar valleys, had been dreaded by everyone for the last six weeks, for on all sides it was reported to be of extreme difficulty, of 19,000 feet

altitude, and exceedingly steep. When once the winter snows had started, it was said to be impassable for man or beast.

Another pass to the south of Gartok, the Ayi La, was also estimated to be 19,000 feet high, and it was on account of these two passes that we had been pushing on so rapidly, for it was absolutely necessary that both should be crossed before the winter snows set in in earnest. To our minds, the Jerka La was the more important, for we had to reach Gartok somehow or other, or else spend the winter in Tibet. Had the Ayi La been closed it would not have mattered quite so much, for we could eventually have made our way down the Indus to Leh, and then to India by Ladak. This latter route, however, would have taken another six weeks or so, and it would have been necessary to abandon the greater part of the heavy baggage till the following summer.

The more intelligent-looking traders and shepherds passed on the road were questioned as to the state of these passes, and, as is to be expected in Tibet, with varying results. The general consensus of opinion was to the effect that the Ayi La was steep, difficult, and probably impassable, but that no great difficulty would be experienced in surmounting the Jerka La. As a matter of fact, the latter pass offered no impediment to our passage, as the ascent was easy, and the summit not much over 15,000 feet in height.

They called the place Par-chu where we pitched the camp, but this name is equally applicable to any of the other small ravines which cut up the country. So much of a muchness are all these places, that a mistake can be easily made when giving instructions, as happened in our case, for the man who went on ahead passed the intended spot, and pitched the small Tibetan

tent almost on the summit of the pass. Fortunately there was but little wind and so no one suffered much discomfort from the cold during the night, but the mistake gave the yak-drivers much extra work, for they had to go a considerable distance before sufficient fuel could be collected for the camp fires. The question of fuel is no small matter when a caravan is composed of such a medley of races as ours was, for the Mahomedans, Hindus, Gurkhas, Tibetans and British all required separate cooking-places, and so it was also with the yak-drivers, Tibetan officials, and the various hangers-on; in consequence, there were seldom less than eight or nine fires burning at the same time.

We had now entered the region drained by the Indus, the greatest of all Indian rivers, though the trickling streams, continually crossed, were not such as would lead one to believe that it could grow to the immense size it attains a hundred miles farther on.

Formerly the main river was supposed to originate from these small streams, but the Pundit Nain Singh proved, about fifty years ago, that they form but a large tributary which joins the main branch a few miles below Gartok. The Pundit was only able to follow up the latter for a few miles, so the actual whereabouts of the source of the Indus is still unknown, though the natives assert that it rises from the northern slopes of Kailas Parbat.

Just before reaching Nik-yu, a clear view was obtained of the whole of Gartok Plain, an apparently desolate, flat, and barren region, hemmed in on the north and south by great bare, rocky ranges. In the fading light, the official capital of Western Tibet could be dimly seen, lying seven miles away on the banks of the Indus, which, winding in and out, meandered through the southern half of the plain.

The reports previously received had fully prepared us for the insignificance of the place which formed the goal of our journey, but it had never been fully realised what a wretched little town it really was, though, as we were to enter it on the following day, the actual description can wait.

Nik-yu, our home that night, is the relay-house for Gartok, and situated seven miles from that place in a nicely sheltered and grassy valley. Here a herd of yaks are kept all the year round, ready for whatever caravan may come along. Awaiting us also at Nik-yu were some servants of the Garpons (Governors) of Gartok, who had been sent over to inform us that their masters had the day previous arrived there from Gar Gunsa, 40 miles away, and were ready to receive us.

The intervening stretch of level plain separating us from the capital was covered at top speed the following morning, and our objective reached on December 9th, exactly two months from the day of leaving Gyantse.

CHAPTER XII

GARTOK REACHED

THE nearer we approached to Gartok the less prepossessing did the place appear. The wind howled across the plain, sweeping the dust before it, while banks of threatening storm-clouds rolled down the mountain-sides.

The Garpons' servants, mounted on sturdy little ponies, cantered on ahead and steered for the nearest of the three houses. This they declared was the guest-house, and was always kept in readiness for any officials coming from or going to Lhasa. It looked forlorn and desolate; the dust lay inches deep in the rooms, and as the windows and doors were only gaping holes in the walls, the wind carried the dust round and round in suffocating clouds and then whisked it out of the doorway.

The men were very anxious to unload the animals quickly and get the baggage inside the house, but the prospect was so uninviting that one of us went over to examine the nearer of the other two buildings. This turned out to be an excellent place, clean and roomy, and with plenty of out-houses to shelter everyone. It was partially occupied at the time, but the chattels of these good people were quickly removed to the third house, after which our loads were brought over and distributed amongst their respective owners.

While the animals were being unladen, we had

time to look around and see exactly what sort of place it was we had got to. It was poor enough in all conscience, considering that it is the capital of Western Tibet, and that the Garpons reside here for about three months in the year, at which time it becomes a busy centre of commerce. Gartok only boasts of three good-sized houses and twelve miserable hovels.

As already stated, one of the large buildings is the guest-house; the one occupied by us belongs to the younger Garpon, while his elder confrère lives in the third. The houses are built of sun-dried mud bricks, and as the beams which support the roofs are large and massive, the rooms have been made exceptionally capacious and airy.

Gartok in reality consists of two distinct places, situated forty miles apart. The one we visited is known as Gar Yarsa or Summer Quarters, and the other, which is also on the Indus but at a lower altitude, Gar Gunsa or Winter Quarters.

At Gar Gunsa there are two houses occupied by the Garpons, one monastery containing six monks, and from fifteen to twenty tents. Here the Governors live for nine months in the year, only residing at Gar Yarsa during August, September and October, at which time all the shepherds and traders of Western Tibet collect, bringing with them their herds of yaks, sheep and goats, their families, goods and chattels, and settle down on any spot they fancy. At the same time, traders from Ladak, Spiti and India arrive, and a brisk trade in cloth, iron ware, copper goods, gold, turquoises, wool and pashm springs up. The annual taxes are then collected by the Governors, law cases tried, and Government business transacted. To vary the programme and enliven the proceedings, pony-races and other sports take place in the plain, while we may be

sure the ladies of the different encampments call upon one another, and, while hobnobbing over their tea, discuss the usual interesting social topics. At the races, many ponies change hands, for the animals of the Gartok district are held in high repute by Tibetans all over the country, being noted for both speed and stamina.

Probably a little betting also takes place on the results of the races, but it must be carried on with some difficulty, for cash is scarce and bookmakers are non-existent.

The same men do not remain here for the entire three months, but move on to other marts, or, having completed their trading, return to their old haunts, their places being taken by fresh arrivals. It is said that but seldom are there less than five hundred nomads and merchants collected here at one time.

How different was the scene on the 9th December! Not a shepherd or a flock was visible in the valley, and the buildings, previous to the arrival of the Governors, absolutely deserted.

As soon as our goods were arranged, a complimentary visit was paid by the Garpons, dressed in all their finery—yellow silk robes and broad-brimmed red silk hats — and accompanied by numerous servants bringing presents of sheep, sugar, grain, suttoo and sweets, all of which were dexterously distributed, to the best advantage, about the floor of the room.

Their stay was of but short duration and the conversation limited to polite and flattering remarks from both parties. Though they would not partake of our tea and cakes, some large bull's-eye sweets proved sufficiently seductive to attract their attention. They were rapidly popped into their mouths, though we were uncertain whether they were not soon transferred

to the hidden recesses of their capacious sleeves for future quiet enjoyment.

The Garpons were both inclined to be suspicious as to whether we were not up to some deep scheme, but when on the following morning they paid their official visit, they not only appeared to be quite reconciled but even seemed to enjoy the mild excitement which our arrival produced.

The elder of the two, Nyen Drong by name, was about forty years of age, of the usual upper class Tibetan type, rather stout, sluggish in both body and mind, and with suspicious little eyes. He but seldom spoke, and contented himself with asking a few questions through the younger Garpon, and in listening to the details of the Treaty of Lhasa. Nothing seemed to interest him very much, and Lhasa was so far away that events happening in that part of the world affected him but little. He, however, appreciated the liqueur brandy (medical comforts), and under its thawing influence became less suspicious and more amenable to reason.

Nasar, the younger Governor, turned out to be a pleasant young man of about twenty years of age, with easy, open manners, fully appreciating the importance of his position and taking a lively interest in everything that went on. He had a decidedly quick mind for a Tibetan, and grasped the facts of whatever was told him at once. Practically the whole of the conversation was carried on through him, and the more important points again repeated by him to Nyen Drong. His position was rather a difficult one, for he was not the original Garpon appointed by Lhasa, but the son of that official, and had been acting as the substitute of his father for the preceding eighteen months. This, however, did not seem to cause him

any inconvenience, and to see the two Garpons together, one would judge that Nasar was the more important.

Both were dressed in identically similar clothes. Loose yellow silken robes hung down to the feet, tied in at the waist with a sash of the same material, the silk being Chinese brocade of the richest quality. The sleeves were long, completely covering the hands, and turned back only when necessity required. Their hats, shaped like exaggerated tam-o'-shanters, were made of red silk with a deep fringe of the same material hanging from the brim.

Their servants were likewise dressed after the same fashion, but in red cloth cloaks and yellow hats. Both Garpons were natives of Lhasa, and grumbled much at the barrenness and coldness of the country they had been sent to.

Their post, nevertheless, carried with it some compensatory advantages, for they ruled over a country in extent nearly as great as England, and their power was despotic. In addition, they made a comfortable little income out of the nomads and merchants in dues and perquisites, and also carried on some trading on their own account; so, taken altogether, they had not much to complain of.

Just before the meeting terminated, the Garpons were each presented with watches and money, and though etiquette prevented them from giving vent to any outward expressions of delight, they were nevertheless exceedingly pleased with the gifts, and the last lingering suspicions as to our good intentions were definitely removed.

One day at Gartok was quite sufficient to complete the work that had to be done, and as the weather became even more threatening, we determined to leave on the following morning.

This was all the more easy, as the yaks which had brought our baggage from Nik-yu had been kept close at hand, and it was only necessary to drive them in from the pasturage to be ready for a fresh start.

By half-past seven the baggage had been all laden and was well on the road, and, after bidding adieu to our now smiling friends, we hastened after the caravan.

Ka Sang, the Lhasa official who had accompanied us from Gyantse, here left on his return journey, intending to follow the same route as that which we had pursued. Although his instructions required that he should see us safely to our journey's end, he had asked to be allowed to go back from Gartok, in order to accomplish the pilgrimage round Kailas Peak, and if that was rendered impossible by bad climatic conditions, to visit the monasteries at the base of the mountain and bathe in Manasarowar Lake. As all was going on so satisfactorily and the Garpons had moreover, lent us two of their men to make the necessary arrangements along the road, there was no apparent reason why we should not accede to his request. Before departing, he received a present of a watch and a bag of rupees, and immediately took his leave in a great hurry, evidently consumed with anxiety as to the safety of his money.

The animals travelled well after their day's rest, and by noon were far up the mountain-side. The track was indistinct and rough and led to the only flat piece of ground to be seen; but it was all too near, for the weather looked more threatening than ever, and every mile gained on this and the following day meant a little less for the march over the summit of Ayi La, and a corresponding reduction in the struggle anticipated at the top.

The Garpons had recommended the Ayi La, not

that it was any easier than many other passes, but because it was the most direct route for Tooling. Within a few miles of the Ayi La other passes cross the range, but none have an altitude of less than 18,500 feet. They are all much of a muchness, presenting a gradual ascent on the northern side and a terribly severe descent on the southern face of the range.

Everyone had hoped that by lengthening the second march we might have got over the pass and camped on the far side, but the distance proved much greater than anticipated, and as the going was abominable, a halt had to be called four miles short of the summit. Our position was a miserable one and the cold intense, as the tents were pitched close to a great mass of ice; any change was out of the question, as the Tibetans had here collected both fuel and fodder. Black clouds whirled down the neighbouring ravines, accompanied by blinding storms of snow and hail. The men sat cowering over their smoking yak-dung fires, while the shivering ponies obtained what shelter they could in the lee of the tents.

Directly opposite where the tents were erected and not over half a mile distant, a herd of about seventy wild yaks were seen grazing on the hillside. They were not a whit disturbed at the sight of so many men and ponies, and, after a casual glance in our direction, went on with their feeding. The mist was too thick to determine whether there were any bulls in the herd worth shooting, so Bailey crossed the valley for the purpose of obtaining a view at close quarters. They soon winded him, however, and though he ran to cut them off, galloped round the corner of the spur and vanished into the mist. They appeared to be mostly cows together with a few very

young bulls and calves, though, as the natives declared that wild yaks are to be found on this range all the year round, it is probable that the more suspicious old bulls were lurking in some sheltering nullah.

Everyone realised the urgency of crossing the pass without delay, and so the following morning, as soon as it was light, all were astir and packing up. As each lot of animals was driven in from the grazing-ground, they were loaded up at once and despatched on their way. Ryder and Wood were almost the first to leave camp, as they had before them the disagreeable task of ascertaining, by means of the hypsometer or boiling-point thermometer, the height of the Ayi La. This process was carried out at the summit of the pass, in bitter cold and deep snow and with the usual accompaniment of a howling wind.

Fortune once more favoured us, for, while making the final ascent, the snow ceased to fall. Had it not been fine, the crossing would have been almost more than the caravan could have managed, for, even as it was, many of the men collapsed from mountain-sickness and had to be put on ponies. The snow lay to a depth of three feet, and in this both men and animals floundered badly; the altitude was also much against them, for at 18,700 feet the air is too thin for the heart and lungs to work properly. The wind beat violently in our faces, but at the summit the whole scene changed like magic, and we seemed to enter into a new world. The sky to the south was almost cloudless; the valley of the Sutlej lay spread out before our eyes, thousands of feet below, and in the far distance the Himalayas stood boldly out against the blue sky, the base purple and the summit capped with fields of snow, whilst here and there glittering pinnacles towered up towards the heavens.

The wind was too keen to allow of a prolonged rest in this exposed position; besides which the ponies had already begun the precipitous descent and required all the assistance that could be given them. All traces of a path had vanished, and they had to make the best way they could down the watercourse. So steep was the ground that the loads, though fixed on the ponies by Government transport saddles, were continually slipping over their withers and occasionally right over their heads. The sick men were compelled to dismount and lend a hand in putting matters right, this being most conveniently effected by turning the ponies about, every 100 feet, so that they faced uphill, in which position their loads were easily readjusted. In this laborious fashion, the caravan finally reached the plain, which, though not particularly flat, had evidently once formed the bed of a great lake.

CHAPTER XIII

INTO A NEW LAND

NULLAHS, with precipitous sides, divided the country into strips of land, fortunately all running in the direction we wished to go. Entering one of these, we soon struck a path, and following this down for three or four miles suddenly encountered a group of men waiting to escort us into Dunkar. We had expected to find this place similar to other villages passed during the previous month, simply a group of mud huts, so were considerably surprised to come upon a flourishing village of substantially built houses and cultivated fields.

To explain Dunkar, I must here describe the Sutlej Valley on the Tibet side of the Himalayas. It is a country the like of which I had never seen before. In ancient times, and before the great Himalayas had been pierced by this river, the whole country, from that range to the present source of the Sutlej, was covered by an inland sea many thousands of feet in depth. Though of such an immense area, the lake apparently quickly silted up, the débris of the surrounding mountains being distributed in horizontal layers over its entire extent. The silting-up process, in comparison with other rock formations, must have proceeded rapidly, for the sandstone and mud have never undergone long and continual pressure, and remains soft and crumbling to this day. It is probable

that, when this depression became nearly full of matter, the waters overflowed through some small rift in the Himalayas, and, with the great weight of the inland sea behind it, the stream rapidly cut a channel through the barrier until the whole bed of the lake was laid bare. Since then, rain and snow have continued the work, wearing away the softer lines in the strata, and forming great clefts and chasms many hundreds of feet in depth, to the bottoms of which the rays of the sun never reach. Narrow precipitous ridges, spire-like pinnacles and isolated plateaux rise on all sides. It is a weird and wonderful sight, but also a depressing one, for neither shrubs nor grass can grow, and a death-like silence reigns supreme. Now and again, in the centre of the largest nullahs, a small crystal stream may be seen trickling over its sandy bed, but during the winter these are few and far between. The sand-stone rock crumbles to the touch and the mud turns to powder on being disturbed, whilst the strata over the whole valley lies perfectly horizontal, showing that this district since its formation has never been subject to earthquakes or upheavals. The illustration gives a very fair idea of the land as seen from above, but from below no picture can adequately depict the sense of isolation of the traveller, as he views the towering cliffs closing him in on every side.

The inhabitants of Dunkar had originally chosen one of these precipitous ridges for their habitations, probably on account of the great number of caves which were there existent. The monastery, as being their most precious possession, has been built on the very summit and far out of harm's way. Round about it are scattered the few dwellings of the monks, whilst lower down, on any promising ledge, the villagers have erected their own homes, utilising

and adding to the natural caves, or excavating others out of the soft rock, as occasion required. Some two hundred Tibetans live round about, and eke out a precarious existence by keeping goats and yaks and growing barley. The fields are situated in a sheltered hollow, at the bottom of which flows a never-failing stream, rising from the ground a short distance from the village and never completely freezing over even in the coldest season.

A cosy little house, situated low down and built out from a portion of the cliff, had been set aside for our use. It was approached by a flight of steps, surmounted by a low but massive doorway, and leading into a sunken courtyard completely hidden from without. To the left were four or five rooms overlooking the stream, and on the right-hand side two caves used as dwelling-rooms. The latter we did not enter, for they were dark and smoky, but they must have been of considerable size to judge by the number of men continually passing in and out. The ponies were picketed just below the building, and for once received a really good feed of crushed straw.

It was such a pleasant change getting into even this standard of civilisation, that Ryder and Wood decided to stay here the next day, for the twofold purpose of working up the maps and having a good hot bath, a luxury eagerly anticipated by all.

The interior of the house had been well swept and garnished, and the walls draped with coloured rugs. With considerable difficulty and much noise, our personal effects were finally arranged in the different rooms, and hardly had this been completed before the savoury odour of cooking pervaded the atmosphere, for our cooks, though no "chefs," were hard workers and had become adepts at preparing a rapid meal.

From our hosts, we learnt that Ram Singh had arrived on the preceding day at Tooling on the Sutlej, distant from Dunkar about twenty miles. It will be remembered that he had left us at Misar and followed the Sutlej down from its source, with the object of extending the survey. It was now desirable to join forces once more, and as no road existed alongside the bed of the river, and the reports as to the condition of the best and most direct path were anything but encouraging, I decided to go to Tooling and bring Ram Singh and his party to Tibu, one march west of Dunkar, where Ryder and Wood would pick us up.

Bailey and I set out at daybreak the following morning, and it was just as well that we did so, for not only was the distance much greater than anticipated, but the going in places was abominable.

Weird and fantastic pinnacles and precipices towered above one on either hand, so completely shutting out the further landscape, that, had it not been for the faintly marked track, the task of finding an exit would have proved almost impossible.

A gradual descent of about 3000 feet finally brought us on to the broad stony shores of the Sutlej River. We had debouched almost opposite Tooling, the gaudily coloured temples and chortans of which place stood out conspicuously at the edge of the precipice, 200 feet above the river.

Men were already on the southern bank awaiting our arrival in order to assist the ponies across, but they could little more than point out the best spot to ford, for the water was too deep and cold for them to enter. The crossing was very difficult and only Tibetan ponies would have attempted it, for the river was about 100 yards broad and 2 feet deep,

and from each shore stretched out for 20 yards or so a thick sheet of ice. This formed the main obstacle, as it necessitated a drop of 3 feet from the surface of ice to the river bed, and a scramble up again on the other side. The little ponies seemed to thoroughly understand what was required of them, and, aided by the Tooling men, pluckily struggled across. A steep path led to the village and monastery above, but the buildings were barely noticed by us at the time, for of far greater interest and importance was the sight of a splendid tree growing by the path, the first seen for five weeks.

Ram Singh and his men were found comfortably installed in a double-storeyed house on the far side of the town, and during their two days' halt had made themselves thoroughly at home; even the three ponies were enjoying themselves, with as much grass as they could eat and almost belly deep in straw.

Ram Singh during the preceding ten days had been fully occupied in making many side excursions, primarily to assist him in his map, but with the additional result that he had visited the forts of De-pa and Tsaparang.

CHAPTER XIV

A FORGOTTEN CITY

TOOLING, interesting place as it is at the present day, is insignificant compared with what it must have been five centuries ago. At that date the town was not situated on the level ground just above the river, but was perched on the very summit of two isolated plateaux a mile or two away to the south. Ram Singh had found time to climb to the nearer and more important of these two, and appeared much impressed by the dangers incurred and the dangers overcome. From him and an intelligent Tooling inhabitant, I was enabled to gather my information respecting the past history and present condition.

Rising about 1000 feet above the river stands an isolated plateau of sandstone, four miles in circumference, from which sheer precipices fall away on all sides. On the summit and clearly distinguishable to the naked eye, are ruins of ancient buildings, standing out sharp and distinct against the sky. The road passed straight from the present Tooling to the foot of the cliff, and then, after a short climb over rubble, led by means of a cave into the heart of the mountain. The approaches had originally been guarded by strong towers and walls, but these had long since fallen into decay and were now in a complete state of ruin.

The summit of the mountain was reached by subterranean funnel-like passages, up which only one man

could climb at a time; and by dimly lit caves, originally existing in the hill, but which had been further dug out and improved by man. Ram Singh declared that nothing would have persuaded him risking his neck up the chimneys, the sides of which he had to climb, but the fear of being laughed at by the numerous Tibetans who accompanied him. By other tortuous paths the crest was finally reached, and here the ancient monasteries, palaces and buildings lay in silent ruin. Many of the temples were in such an advanced state of decay that even their outer walls now formed little more than heaps of rubbish; yet others were in a fair state of preservation, having been constructed probably at a more recent date. The wood rafters had been removed, but the paintings and decorations in the rooms were still clear and distinct. What most impressed Ram Singh were the great clay figures of Buddha seated as of old, in the heaps of ruin, apparently but little affected by the years of storm and rain which had passed over them. All movable decorations and images had long since been removed to the new temples in the town below, where the gods, bronzes, and even carved-wood ornamentations are now kept under lock and key.

These ancient and precious images were examined by us the following morning, the guardians of the sacred relics escorting us round and giving us all information. They are placed in rows, shelf above shelf, in small temples built around the larger ones, and are dusted and looked after with great care. Many are well executed, but others are of very rough workmanship and appear to be of great age. One piece of wood-carving of Indian design and ornamented with heads of elephants, Indian antelope and other



THE PLATEAU UPON WHICH THE ANCIENT TOWN OF TOOLING STANDS.



THE ANCIENT CANTILEVER BRIDGE WHICH SPANS THE SUTLEJ NEAR TOOLING.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

popular Hindu emblems, was said by the monks to have belonged to the throne used by one of the ancient kings.

The intelligent inhabitant of Tooling, whom I have alluded to previously, and who suitably filled the post of professional guide, volunteered information as to the ancient history of the town, but this may have been concocted on the spot solely for my edification. As, however, some of it may be true, I give it for what it is worth.

"Western Tibet," he declared, "was formerly an independent kingdom, of which the old town of Tooling was the capital, and here not only the kings resided but the ecclesiastical heads also. For centuries the country had been prosperous and powerful, but about four hundred years ago the land was invaded by a race from the north, the capital captured and its most precious treasures carried away. After the departure of the invaders, the old capital was deserted and allowed to fall into ruin, and as they had now nothing of value to protect, the three new temples and the surrounding houses were erected on the level river bank far below."

Who the invaders were he could not say, but suggested that they might have come from Chinese Turkestan. Taking into account the great natural strength of the place, it is probable that it was not captured by assault but capitulated after a protracted siege, the garrison being forced to surrender through lack of water, as has happened so many times to other fortresses in this part of the world.

The outlines of the houses situated near the edge of the precipices could be distinctly seen from where we were, but, to my great regret, time did not allow of my making an inspection myself.

Tooling is still the chief ecclesiastical town of Western Tibet, and here the head lama of the country resides; he did not show himself during our short visit, for which we were not particularly sorry, as these priests are rather uninteresting and closely resemble one another.

The larger of the three monasteries was visited the following morning, and proved very similar to other Tibetan temples, excepting that the main hall was more than usually dirty, whilst the gods were arrayed in cheaper garments. Even the brass and gilded figures were decorated with fewer turquoises and coloured stones, though their sanctity seemed in no way diminished in the eyes of the custodians, who showed them to us with evident pride. Odds and ends of various kinds were mixed up with the gods, on the shelves, or propped against the wall, and valued for their connection with the ancient town.

Tooling presents all the outward appearances of prosperity, and is certainly cleaner than most Tibetan villages. Fields of barley surround it on three sides, and numerous trees are dotted about, those on the level small and stunted, but, where situated in the sheltered nullahs, of luxuriant growth.

At the time of our visit, the place wore quite a holiday appearance, for not only the three temples, but the houses, walls, chortans and all prominent rocks were painted in perpendicular stripes of red, white and blue. The three temples, though closely resembling one another in construction, were decorated in a different manner, one red and white, the second blue and white, and the third blue and red.

During our inspection of the various points of interest, the baggage animals had been laden up and were already on their way.

Taking my loquacious guide with me, I mounted a local pony and set off in the opposite direction to see a famous bridge which spans the Sutlej a few miles above Tooling. My new mount was a nasty little beast, which objected strongly to leaving his home, and preferred to go anywhere rather than keep to the road. The bridge was not over three miles away, but I covered a good six before getting there, having unwillingly entered many ravines and snowdrifts lying far from the path.

Considering the backward state of the country and the ignorance of the people, this bridge is of decidedly clever workmanship. It is of cantilever design and constructed of wood, but as the beams are of insufficient length and strength to entirely support the weight, they have been reinforced by iron suspension chains. The approaches, though tortuous, are fairly wide, and pass under massive stone archways, to which the supporting chains are attached. The narrowest point in the whole of the Sutlej River has been chosen as the site, each end of the bridge resting on projecting rocks. During the melting of the snows the water rushes through this narrow channel with irresistible force, and the depth is then of not less than twenty feet.

According to the Pundit Nain Singh, the bridge is supposed by the natives of the country to have been erected by Alexander the Great; my guide, however, scoffed at this idea, and gave it as his version that it was erected by the last king of Tooling, four hundred years before, and had been repaired from time to time by the local inhabitants. My own opinion is that the present construction is certainly under one hundred years of age, though in all probability some kind of bridge has existed here for many centuries.

Over this causeway a portion of Zarawar Singh's army marched in 1841 on their way to Pu-rang.

At the southern entrance, in a niche of the wall, is a most peculiar stone, bearing the exaggerated imprint of a dog's foot. This is believed by the people to have been made by a dog belonging to the king, who not only ordered but himself superintended the erection of the bridge.

A few hundred yards below, in the centre of the broad river bed, stands a prominent rock, on which it is said the lamas, a few years ago, placed much gold as a peace offering to the river gods. As the rock during the winter months is high and dry, it is hardly likely that the money remained there for very long, or that it was worth the trouble of going over to see if any remained.

Rickety as the bridge looked, it had to be crossed, for the Sutlej was here far too deep to ford. The guide went over first and the ponies were driven over singly. A flimsy rail ran along each side, so the animals could not go very far wrong, but they little approved of the creaking of the timbers, and vanished through the opposite doorway at a gallop.

Rundle, my orderly, was waiting a few miles down the bank with my own pony, so, bidding adieu to the guide, we set off after the caravan, following them by their tracks into a side nullah. Passing them, we pushed on ahead, being lucky enough to meet a small boy who pointed out the shortest road to Ti-bu, where we arrived late in the afternoon.

Ti-bu turned out to be the most peculiar of all our camps, for it consisted of a collection of sheep-pens and a mass of sandstone rock, honeycombed with natural caves. These had been further excavated and improved by the inhabitants, and though the ceilings were black with smoke, the floors were smooth and clean. Some of the caves were of sufficient size to house thirty men or more, but as the followers were doubtful as to

whether we should approve of their company, they had pitched *our* tents outside and amidst the decidedly evil-smelling pens. The animals were contentedly grazing around, smoke issued from every opening, and the bright fires crackling merrily inside offered a cheery welcome.

Till now there had been little to find fault with in the track, for, since entering the Sutlej Valley, the lie of the ravines had been all in our favour, the path to Tooling, and from there to Ti-bu, lying along the beds of tributary nullahs in the direction we wished to move, and where at any rate the going was fairly good. Now we were to experience the reverse of such pleasant conditions, for the track led *across* the nullahs, with ascents and descents of from two to three thousand feet. The descents were rapid and would have been almost enjoyable, had it not been for the rocks hidden beneath enticing mounds of sand, and the corresponding ascent on the opposite side of the nullah which was ever in our minds and before our eyes.

It was bad enough for man, but proved doubly so for the ponies, for downhill their loads pinched their withers or slipped over their heads, and uphill rubbed their protruding hip-bones bare.

Before reaching Ky-ni-puk, two of these terrible ravines had to be negotiated. Only one had been anticipated, and on breasting the crest, after struggling for three hours with the animals, it was enough to take the heart out of anyone to see just ahead another equally bad, and to learn that the camping-ground was on the far side.

The illustration is taken from the path half-way up the second rise. At that spot the road is unusually wide, but to counterbalance this advantage the sand is additionally soft and deep.

For countless ages, this track has been used by caravans of yaks laden with the produce of Western Tibet on their way to India, though, had Nature been a little kinder to man, the route would have become much more popular than it is, for the obstacles are enough to discourage the stoutest heart, and the majority of traders now take their caravans by the rather longer, but more level route, through the Chumurti country to the north.

Ky-ni-puk is one of the few level spots to be found in the district. It is not a particularly interesting place in itself, but in comparison with the other camps it is a paradise. The valley is nearly half a mile wide, and possesses a good clear stream with level grassy banks.

A surprise awaited us on arrival, for two Tibetans were there, who informed us that someone, but they did not know who, was on his way from India and would likewise arrive that day, bringing great numbers of men laden with fresh stores and provisions for our use. We were all consequently on tenterhooks, and eagerly awaited the new-comer. The whole affair turned out rather ludicrous, and our disappointment was great when the coolies began to arrive, twenty-four only in number, and, in place of the expected stores, laden with bedding and such-like articles.

The identity of the traveller was soon revealed, for he came over to our tents immediately after his arrival, bringing several letters and a large bundle of newspapers, the latter kindly sent on to us by Mr. Hart, Deputy Conservator of Forests at Simla, and by the Moravian missionary at Spoo. Letters of introduction told us that he was Thakur Jai Chand, late Registrar of Lahoul, and now the first Trade Agent for Gartok. His departure from Simla had



SANDSTONE CAVES AT TIBU.



LEAVING A RAVINE IN THE SUTLEJ VALLEY.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

been much hurried, in order that he might reach the capital of Western Tibet whilst our expedition was still there, and so be formally introduced to the Garpons before taking up his duties.

Two things, however, had occurred to upset this plan. Firstly, our caravan had travelled at a faster rate than had been expected, and secondly, Thakur Jai Chand had been detained for eleven days at the border village of Shipki, while the dzongpon of Tsaparang referred the case to Gartok. On a satisfactory answer being received, Jai Chand was allowed to proceed and had done his best to make up for lost time. The coolies carrying his kit and sufficient food for the journey were hillmen from Simla, and had been well fitted out with clothing and bedding, but they seemed to have had about as much of Tibet as they wanted, and were already pining for their warm homes on the southern slopes of the Himalayas.

It was soon settled that eighteen of these men should transfer their loads to yaks and return with us to India, leaving six only to accompany Jai Chand, and that we should hand him over one of the two officials who had accompanied us from Gartok. We had half a mind to take him back to Simla, for there would be little work for him to do at Gartok for many months to come, and, to make matters still worse, the Ayi La, which he had to cross, was now practically closed for the winter. Since our caravan had left that pass, snowstorms had perpetually swept over the range, and the few glimpses obtained, when the clouds broke, showed it to be covered with snow. It was evident that we had barely crossed in time; but even now, as it turned out, it was not absolutely impassable, for Jai Chand subsequently reached Gar

Gunsa safely and without the loss of any of his baggage.

Jai Chand comes from a hill family of good reputation, is quite a young man, and combines with pleasant, quiet manners a fluent knowledge of the Tibetan tongue, and altogether he appeared to me to be the right man for the post. I could do but very little to help him on his way, with the exception of giving letters of introduction, and handing over to him the remaining presents, including brooches, rings, etc., which had been brought as gifts for the Tibetans on the road.

The whole of this jewellery was hardly worth five pounds, but the glittering handfuls of Parisian diamond rings and gilt chains so worked on the imagination of the coolies who saw the transaction, that fabulous stories as to the immense wealth we possessed soon became common talk in the villages of the Sutlej Valley. These things had originally belonged to Mr. Wilton, and had been intended as presents for the Chinese during his journey to Pekin, but when that was abandoned, everything had been handed over to our expedition.

For presents, cheap jewellery is almost useless in Tibet, for the priests are not allowed to wear any ornaments, and the people know very well whether the stones are real or not, and whether the metal is plated. Scarlet broadcloth, scarves, knives and such-like things, are far more appreciated and take up but little extra space. If room is very precious to the traveller, the bulkier of these articles can be dispensed with and turquoise ornaments taken in place. This is the only form of jewellery popular amongst the people at large, and which is valued above its intrinsic worth. The rough stones are

bought at the fairs held in the country and conveyed by the Indian merchants to Amritsar and Delhi, where they are mounted in gold and silver, and afterwards reimported. Practically every matrix originally comes from Tibet, but though inquiries were made at all the more important places, no information could be obtained as to the situation of the mines. The Phari people obtain their supply from Calcutta, Shigatse from Lhasa, Lhasa from China and Leh, and Leh from Lhasa, whilst at many other places the people merely said that they did not know where the stones came from, that they had had theirs for years, and that none were to be found in their district or anywhere near. Despite these unsatisfactory answers, the consensus of opinion leads one to believe that they exist in the greatest numbers in the country situated between Lhasa and the western border of China.

The newspapers proved so engrossing, that, before and after dinner, conversation was decidedly spasmodic, as each one searched for and announced those details which were to him of special interest. All were naturally eager as to the progress of the war, though little of importance had occurred, and Port Arthur was still uncaptured.

Late that night another visitor arrived, in the person of the dzongpon who had detained Jai Chand. Ignorance was pleaded with regard to the clauses of the Treaty, and as it was quite possible that he had not been officially informed, we had to extend to him our forgiveness. His home, a double-storeyed house, looked upon by the natives as a fort, was at Tsaparang,[1] on the Sutlej, a few miles below Tooling. Ram Singh had visited the place, but was not much impressed either by its strength or internal comfort. About

[1] Or Chabrang.

70 feet square and 15 feet high, it is situated at the foot of a rock, surrounded by a few huts and a small area of cultivated ground. The dzongpon's district stretches to Shipki, from which place so many British officers have been turned back, though the present man may not be the one responsible for such actions.

CHAPTER XV

ACROSS THE FRONTIER

THAKUR JAI CHAND, before leaving on the following morning, thoroughly prepared us for the disagreeable journey which was to be our portion that day, but with the exception of the driving snow which beat full in our faces, there was nothing particularly trying until we were within three-quarters of a mile from camp. This, of course, was at the bottom of a nullah, but what a place! The track literally dropped over the precipice, twisting in sharp zigzags down the face of the cliff wherever a projecting point offered sufficient room for a turn. Now and again, an old fault or a landslip afforded an opportunity to the ponies of halting for the readjustment of their loads, but it was labour wasted, as a few feet farther on matters were as bad as ever. Down and ever down went the path, until, 3000 feet below the crest, the bed of the ravine was reached. Here nothing existed but the absolute minimum requisites for a camp—a patch of ground for the tents about 40 yards square, a few straggling blades of grass for the animals, an icy crystal stream, and a little scrub for fuel. Gaunt, barren cliffs towering all around, a stream rushing through a narrow rift, the sides of which, apparently closing in a few hundred yards above and below, gave the river the appearance of arising from and disappearing into the bowels of the earth; whilst above was seen a mere streak of scudding storm-clouds. Except

by the path we had descended and the one which we were to climb the following day, no exit from the ravine was possible for man, and a goat would find the task none too easy. Could any spot on earth more nearly resemble the infernal regions?

The ponies that night went to bed supperless, but not through any fault on the part of the Tibetans: they had started with a dozen loads of hay, but the projecting and jagged rocks on the road had each taken their quota, so that by the end of the day practically nothing remained.

A full three hours was taken to get clear of the ravine. From the crest onwards there was little to complain of, for though the road was rough, sandy, and deep in snow, yet it was infinitely preferable to anything recently experienced. Here we were surely and steadily covering the ground, whilst previously, many hours of weary struggling only resulted in the gain of a mile or so in the required direction.

It can be easily understood how our calculations had been upset by the vicissitudes encountered, for the marches had been originally measured off on the map, and the date of our arrival at Simla fixed accordingly. We were now two days behind time, and the arrears had to be made up somehow or other.

The two next camping-grounds bore the almost similar names of Luk and Nuk; the former village is decidedly preferable as a winter residence, for it at any rate presents the advantage of being sheltered from every wind that blows. Hills surround it on all sides, those to the west being steep and rocky, and here the stream which waters the valley escapes by a deep rift. Balancing on the edge of the southern precipice are the remains of an ancient castle, far too old for the natives to know to whom it belonged or anything of its past

history. The present village is a pleasant, quiet little spot situated on both sides of the stream on the very lowest ground possible, and having a population of about one hundred.

Nuk is both smaller and poorer, containing at a liberal estimate not more than sixty souls; it was probably a place of some importance in earlier days, for close by are the ruins of two separate castles or monasteries. It is difficult to determine which they were, for the ancient temples were all well fortified and placed in nearly impregnable positions. The larger mass of ruins stands on the brink of a 500-foot precipice, inaccessible on every side but one.

From Nuk we moved to Chang Dang, a spot far removed from human habitation, and in winter one of the bleakest spots on earth. Snow lay deep over the whole country, and this had to be removed from some old sheep-pens before the tents could be pitched.

The cold was intense, but fortunately the breeze was light, or otherwise it would have been almost unbearable, for the temperature dropped below anything we had experienced before. The last examination of the thermometer on turning in for the night, showed the quicksilver at 14° below zero and still slowly falling. On rising the next morning, it was found to be then registering minus 26° F., or 58 degrees of frost. Cold such as this has a paralysing effect on man and beast; the ponies seem too numbed to move, the muscles of the men become enfeebled, and the mere contact of the fingers with iron and wood is so painful that the work of loading and unloading develops into a most laborious process.

The Sirang Pass was negotiated without much trouble, and the great drop into the valley, in which Miyang is situated, accomplished without an accident,

though, on account of the narrow ledges of rock being filled with snow, it was more by good luck than anything else that the ponies were safely piloted over the most dangerous points.

Geographically, the pass is the frontier of India, for the country from here onwards is in the Himalayas proper, and of quite different formation to the district just left.

From a height of 1000 feet, one looks right down upon the village of Miyang, a compact and prosperous place, surrounded by cultivation and with a fair sprinkling of trees.

Shipki, the most westerly village of Tibet and the largest seen since leaving Lhatse, was entered on December 23rd. It is not easy at first sight to believe that it contains a population of seven hundred, but more careful scrutiny reveals the fact that houses are scattered all over the slopes of a great spur, and are of the same design as those found along the lower reaches of the Sutlej and in the Indian hill villages of the Himalayas. Every advantage has been taken by the inhabitants to cultivate the land wherever the slope permits, and at those spots where rocks are too abundant to allow of ploughing, apricot and other fruit trees have been planted.

Below Shipki two bridges span the Sutlej, one being of suspended ropes, looking even more than usually shaky and dilapidated, and over which it would be hardly safe for more than one man to cross at a time. The other is a cantilever bridge of wood, built high above the rushing water, with no handrail, and so narrow that one step on either side of the centre line would precipitate the traveller into the river. It must be of greater strength than appearances lead one to believe, for nearly all the Indian caravans of baggage

sheep here cross the river every year on their way to the Chumurti country. Fortunately, we were not forced to use either, for a broad firm causeway of ice was found just below Tyak, over which the baggage animals crossed the river, while the riding-ponies waded through at a ford.

Two paths lead from Shipki to Khub, the first village in British territory: one crosses the steep spur which runs close up to the river and ends precipitously, and is always utilised by transport and riding animals; the other passes round the base of the cliff alongside the river. The latter route is long, narrow, and at times dangerous, though favoured by the coolies, as they escape the stiff climb. It was necessary that we should also follow this plan, the coolies with the lighter loads taking the lower road, whilst the yaks and ponies tackled the hill. Yaks being plentiful, our ponies were relieved of their loads, a fortunate circumstance as it subsequently proved, for within a few hundred yards of Shipki their troubles commenced.

Here the caravan entered the region of snow, which at first was easy enough to get through, but steadily increased in depth as we advanced. As each 1000 feet was passed, the rate of progress diminished, and the rests became more numerous and of longer duration. At 4000 feet the line of animals extended over half a mile, the weaker beasts dropping farther and farther to the rear. Many showed signs of giving out entirely, for the snow had now reached a depth of over three feet, and this, added to the steepness of the slope and the difficulty of obtaining any firm footing, told terribly on all. This had been anticipated, and a few spare yaks brought along for the purpose of beating out a track when driven on ahead. Their services were now called into requisition, but they proved almost useless, as they

were far too wild to do their work properly. The ponies, whenever they saw a slope that offered less of a struggle, insisted upon leaving the track, and in a moment or two were floundering helpless in a snow-drift. The men worked splendidly, pulling, pushing and urging the tired beasts onward, though they wanted all the breath they had for themselves.

However, passes, even such as this, must terminate at some time, and after six hours' struggle the summit, 5000 feet above Shipki, was reached, though man and beast were in an equally exhausted and bedraggled condition. The descent afforded at first a delightful contrast, but before the 6000-feet drop into the village of Khub was accomplished, many of the pleasures had vanished.

As the coolies on the lower road also experienced great difficulties, both parties arrived in driblets, and it was not till nine o'clock at night that the last load came into camp. Nothing, however, had been lost, this satisfactory result being due to the energy and pluck displayed, not only by the Tibetans, but also by our caravan-men, who, when first engaged at Gyantse and Shigatse, were regarded as the riff-raff of the country.

Once again were we on British territory, though still over 200 miles from Simla.

The Tehsilder of the district was awaiting our arrival, and everything that could be done to make us comfortable had been thought of and provided for.

This was Christmas Eve, but there was no jollity or feasting; all were far too tired to do anything more than have something to eat and turn in.

Khub is the terminus of the Himalayan-Tibet road which runs for 218 miles without a break to Simla. It is a fine piece of engineering work, but the three last marches before reaching the frontier leave much to be

desired, for at present the gradients are terrible and the path consists of little more than great boulders. Improvements are, however, rapidly being effected, and in some places an entirely new alignment will probably be carried out.

Considering the difficulties still existing along this route, it is surprising how the people manage to trade at all, and the thousands of maunds that pass annually to and from Tibet speak volumes for their energy and trading capacity, and all this will be further increased when the road to Shipki, round the precipice, has been fully constructed.

Due allowance had been made for delays and difficulties on the road from Gyantse to Shipki, and while congratulating ourselves on the satisfactory progress the expedition was making, a disaster had happened on the British side of the frontier which came near to wrecking our plans.

Ten miles below Khub, a great cantilever bridge, regarded as an engineering triumph, spanned the Sutlej, carrying the road from the left to the right bank. It had only been completed and opened for traffic in the autumn, and was looked upon by the natives with awe and admiration. But for us it was to be of no use. The timber, obtained from the neighbourhood, proved to be exceptionally brittle, for, three weeks before our arrival, the lower beams gave way close to the piers, and the whole structure was precipitated with a crash into the torrent below. Learning of our approach, Mr. Hart, Deputy Conservator of Forests, gave immediate orders for the construction of a new bridge, leaving matters in the hands of the lumbadars of the neighbouring villages as to the particular method by which the river should be spanned.

Three immense trees had been felled and placed in position upon two projecting rocks, immediately above the site of the old bridge. This new structure was naturally only of a temporary nature, but sufficed for all requirements, though it sagged to within a foot or two of the water. It was of sufficient strength to support the animals when driven over singly, and the baggage was carried across by coolies.

At Spoo, a village situated close by, a delightful surprise awaited us, for we were met half way down the hill by the Moravian missionary, who has lived here for many years.

We were promptly carried off to the Mission buildings, where a repast of the rarest delicacies had been prepared.

On occasions such as these, the smaller details often impress themselves the most forcibly on one's mind, and I feasted my eyes with unbounded delight and admiration on the spotless tablecloth and the folded napkins.

In the corner of the room stood the Christmas tree, so lately laden with presents for the village children.

Our host and hostess were kindness itself, and a delightful afternoon was spent in looking over the neat and comfortable buildings, the prize fowls, the orchards, and the hundred and one things which appeared so welcome and so strange to our eyes after a year spent in Tibet.

As the story of my previous journey ends with an account of the hospitality shown by the Moravian missionaries at Leh, so also does this part practically terminate with a grateful acknowledgment of the many kindnesses received from the members of the same Society stationed at Spoo and Chini.

When 100 miles from Simla, a detachment of

mules was encountered laden with stores for the expedition. These had been despatched by order of the Foreign Secretary, with the intention that they should reach us at Gartok, but our rapid progress had upset all calculations. However, two of the boxes were very welcome even at this stage of the journey, for the men were out of ghi and ghoor, necessities for the native of India.

By undertaking double marches on two occasions, the days lost in the Upper Sutlej Valley were made up, and the expedition reached Simla on January 11th, three months and a day from the time of leaving Gyantse.

Here we were hospitably entertained by the members of the Simla Club, whilst the followers were housed in the serai or put up with their friends.

On the following day, the dispersal commenced, the first to leave being the Tibetans and men engaged at Gyantse. Very few of them had ever seen a railway train, and on the day of arrival they were found on the line, watching with awe, but keeping well clear of, the engines. So great was their anxiety to experience the unknown delights of railway travel, that one and all requested to be sent to Darjeeling by train, from which place they could easily reach their respective homes. And in this way they left us, a happy, delighted lot, with their belongings around them and their pockets full of well-earned money. Several could speak no Hindustani and only had the vaguest idea as to where they were going, but they cared little, and doubtless safely reached their destinations in time.

Then the remainder gradually dispersed, their sorrow at leaving overshadowed by their joy at the termination of the continual tramping and discomfort,

mingled with the feeling of satisfaction that everything had passed off so well.

The ponies were disposed of to the hillmen of Simla, and the mules absorbed into the mule corps at Umballa.

As an after result it is pleasant to record that Ryder was awarded the Patron's Gold Medal of the Royal Geographical Society for survey work carried on during the Tibet Mission Expedition and the journey here related.

Tibet has an irresistible fascination for the man who has once travelled in the country, and though one is always delighted to leave the discomforts and hardships inseparable from exploration, and to revel in the delight of civilisation again, yet before many months have passed the longing to see it once more returns with redoubled force.

And so it is with my comrades and myself, my last wish being that some day we may meet there again, as no man could desire more staunch and pleasant companions than Ryder, Wood and Bailey, and last, but by far from least, my old comrade of the first journey, Hargreaves.

APPENDIX

THE FAUNA OF TIBET

THE KIANG (*Equus hemionus*)

THE kiang or wild ass of Tibet is to be found in all parts of the country, and frequents either low or high ground, hill or plain, from 14,000 to 18,500 feet above sea-level. It stands about 14 hands at the withers, is of a powerful, symmetrical build, and has an easy, graceful carriage, except that the head is borne rather high. The hair is upright, close and wavy, and with conspicuous contrasts of colour. The upper half of the body is a dark rufous brown, with a still darker line along the ribs and spine, and an equally dark patch on the hind quarters and face; the marking on the latter is such as to give the animal an exaggerated appearance of being fiddle-headed.

The throat, chest, abdomen, inside the legs and all below the knees, are white; the contrast in colour in some lights is very noticeable, while in others the animal becomes perfectly invisible. The mane is thin and stands erect; the tail is similar to that of a donkey; and the hoofs small and formed of the hardest horn.

They are to be met with either singly, in twos and threes, or in droves of twenty and thirty.

The breeding season is about the middle of August, the females retiring to the highest ground possible before giving birth to their young, of which one is the usual number.

In character the kiang is bold and inquisitive, and rarely able to resist the temptation of an inspection of men or ponies; he keeps at a distance of from 100 to 200 yards,

wheeling round and round a caravan for miles. This curiosity is often a cause of annoyance to sportsmen in search of nobler game, for the kiang galloping round and snorting violently invariably puts other game aminals on the alert.

Young kiang have been caught and partially tamed, but all attempts at converting them into baggage animals have so far met with failure.

The call of the kiang is a bray, and not a neigh; statements have been made to the contrary, but there is no doubt on the point, the bray being similar to that of the domesticated ass, only rather more shrill and uttered more quickly.

During the spring their intestines are infected with a grub of reddish colour, one inch by half an inch, but they seem to cause no inconvenience; when similar grubs are found in ponies, the Ladakis declare that it shows the animals are healthy and putting on fat.

All over the Chang paths may be seen, one foot wide and quite clear of stones; these have been made by the wild ass, and usually lead to or from water and good feeding-grounds. As a rule they travel in single file, but when alarmed move and form like a troop of cavalry, often having one in front and one or two on the flanks to act as scouts; during these movements they repeatedly shy at imaginary objects, raising clouds of dust at every turn.

Their powers of scent and hearing are fair, but in length and quickness of sight they probably excel any animal in Tibet. So numerous are they in certain parts, notably round Shemen Tso and in the upper reaches of the Brahmaputra, that hundreds may be seen at one time. They are regularly hunted and killed by the natives, who eat the flesh, which is hard and coarse and when dried forms an article of commerce.

Wild Yak (*Bos grunniens*)

Both the English and Latin names of this animal are somewhat misleading; throughout Ladak, Rudok and Tibet the wild yak is known by the name of "daunk"—the term "yak" being applied to the domesticated animal, while the cross between the yak and the common cow is termed a "zoe." Moreover, as the wild yak never grunts (that accomplishment being confined to the tame variety), it is ridiculous to apply to it the adjective "grunniens."

These wild cattle are magnificent creatures, and were once common in the Changchenmo Valley, but they ceased to visit there many years ago, and are now not to be met with west of Arport Tso, over 100 miles from the frontier of Ladak. They have their favourite haunts, and though often seen in immense herds, are never to be found dotted about barren stretches of country, like kiang or antelope. The most northerly point at which we saw one was lat. 34° 45′, though there is plentiful evidence that they go farther north during some months of the year.

The oxen stand between 17 and 18 hands at the shoulder. They are coal-black in colour from head to foot, except that in the males the face and muzzle are grey. Their bodies are covered with long, wavy hair, which grows to its greatest length along the sides below the ribs. Their immense tails are their most noticeable point; these are waved violently about when angry or alarmed, and not only give them a ferocious appearance, but put the whole herd on the alert.

On account of its colour, the wild yak forms a conspicuous object on the hillside, and when found on light-coloured soil can be distinguished with the naked eye for a distance of six or seven miles. With the exception of man, however, it has no enemy to fear.

They are most commonly met with either singly or in herds of fifteen to fifty—the solitary animals usually being old bulls. Their favourite haunts are easy, sloping, grassy valleys, with water close at hand.

Isolated cases of charging have been reported, but it is

probable that these were attempts at escape, for even when wounded and at close quarters the daunk will make every endeavour to escape. When a herd obtains the scent of a human being, they all rush together and remain thus with their heads towards the threatened danger, until the obnoxious smell has vanished and their fears are allayed. Oddly enough, they are not much alarmed at the sight of a man, and, should he be in a kneeling or crouching position, will often take no notice of him whatever. When once thoroughly alarmed, they move away at a trot and a gallop, their tails waving from side to side, keeping this pace for hours and never halting until many miles of country have been covered and a place of safety found.

The eyesight of the daunk is commonly believed to be bad, but it is really excellent, and many a fine beast owes his life to this fallacy. Their powers of hearing are only fair, but it is in their marvellous gift of scent that they surpass all animals on the Chang; they can wind a man at a distance of four or five miles. They are wonderful climbers, and however rough the ground may be, it never seems to affect their rate of progression.

The cows are smaller than the bulls, and usually give birth to their young about the last week in June.

The grubs found in the kiang and antelope also infect the daunk, living under the skin on both sides of the spine.

These animals are sometimes shot by the nomads, but are more often trapped, being caught by the foot in a similar but stronger trap to that used for snaring antelopes.

Their flesh makes fair eating if kept for a considerable time, but in my opinion the soup made from the feet is much overrated. The tails form a considerable article of commerce, and are in great demand for the weddings of wealthy natives of India.

The horns do not depend for their length on the age of the animal, but probably on his health and strength and the nature of the grazing-grounds. Short horns are usually thick, and long ones thin. The record pair measures, I believe, thirty-nine inches.



TIBETAN GAZELLE.



TIBETAN ANTELOPE.



WILD YAK.


LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

I give here the measurements of one animal carefully taken with a steel tape:—

	ft.	in.
Height at shoulder	5	9
Total length	11	9
Length from muzzle to root of tail	8	8
Length of tail	3	1
Length of face	2	3
Girth of body	8	9
Girth of neck at thickest part	6	8
Girth of neck at thinnest part	4	1
Length of horns	2	9
Circumference of horns at base	1	5

The Tibetan Antelope (*Pantholops hodgsonii*)

This antelope is more common and roams over a greater range than any other species of animal in Tibet. Anywhere and everywhere above 15,000 feet it is to be found, either singly, in twos or threes, or in tens of thousands, as seen by Captain Deasy on Antelope Plain and by ourselves on the plains beyond, where, as far as the eye could reach, the whole country seemed covered with does and their young.

They stand about thirty-three inches at the shoulder, and are of a reddish-khaki colour in summer, the bucks black and white in winter, the hair close to the skin gradually changing to a French grey; this is about three inches in length, upright, brittle and set very close, affording a good protection against the bitter Chang winds.

These antelope have two noticeable peculiarities: one is the large groin-pit on the inside of the thigh, large enough to contain a man's fist; in it is secreted a musky-smelling yellow powder. The Tibetans believe that when the animal is pursued he fills these pits with air, thereby enabling him to cover the ground with greater rapidity. The second feature is the extended and puffy nostrils, which detract from the beauty of the head. During the rutting season, which takes place towards the end of November, at which date the bucks are in a constant state of war, these nostrils are used for bellowing challenges to all and sundry. It is a deep-toned roar of rage or defiance, and seems to have a

dispiriting effect on the courage of the younger or more timid bucks near by. The bellow is more what one would expect from a savage and carnivorous beast of the jungle than from an antelope. Neither does this roar cover a want of pluck, for it is followed up by a vicious charge. If the opponents meet, a furious combat takes place, in which blood flows freely, as was seen by us on several occasions. As a rule, however, the weaker recognises his inferiority at a distance, and flees ignominiously.

They must find it difficult to live through the winter, for very little fodder is to be found, and they subsist almost entirely on their own fat. In the spring they are wretchedly thin and infected with the large grub similar to that found in the intestine of the kiang. In the case of the antelope, however, the grubs live below the skin of the rump, thriving and fattening on the flesh underneath. An animal may have from forty to sixty of these pests feeding upon him at one time, each of which has burrowed a hole through the skin. This state of things readily accounts for the vicious prods which the bucks continually make at their hind quarters with their horns. Bucks and does are equally infected by these creatures, which die or escape early in the summer, barely leaving a scar behind. During August and the first half of September they are again worried by some insect which evidently causes much pain, and in all probability the ova of the above-mentioned grub are then being laid.

During the last week in June or the first week in July the does give birth to their young — generally one in number. They retire to the most out-of-the-way places, and do not venture again into the plains until three or four days after the event. Whether it is a provision of nature on account of the scarcity of food, or whether many of the does are barren, it is impossible to determine; but the fact remains that only one half to two-thirds of the females have young annually. The young can move as fast as or even faster than their mothers when only a few days old. Bucks and does seem to be about equal in number, but during the summer they live apart and in different parts of the country.

Tibetan antelope object to a warm sun, and on fine days, should a pond be near, will stand in it for hours cooling themselves in the nearly freezing water. Their cry is a "baa" similar to that of a sheep, while the alarm-note is a snort, accompanied by a stamp of the fore-foot.

In character they vary considerably: some make off at the first sight of man, while others take no notice whatever, and will even advance for closer inspection. A hat or a small portion of the body exposed during a stalk will often act as a sufficient inducement for the animal to advance out of curiosity, and their habit of stopping when 150 or 200 yards away renders an easy shot always possible, and makes the sport of shooting them a poor one.

"Forms" similar to those made by hares are to be found all over the country, but principally on hillsides, whence a good view all round may be obtained; when chased or alarmed, bucks and does will often throw themselves into these holes, where their bodies remain hidden, though in the case of the bucks the horns still show up sharp and distinct above the level of the ground.

Does carry no horns; those of the bucks are lyre-shaped, and bend inwards and forwards at the tip; they are considered by some to be the most beautiful in existence, and grow to from 24 to 25½ inches in length, but rarely more. The largest I have secured were 27¼ inches: the record is 27¾.

Their sight is powerful and quick, and their sense of scent and hearing fair. All their motions are graceful, the trot being particularly beautiful, as well as easy and rapid.

During the months of May and June and in the early part of July they are usually to be seen trekking westwards, probably to the pastures where the young grass is sprouting in the Western Chang.

They are trapped and snared in large numbers by the natives, bucks, does and young being slaughtered indiscriminately. The snares are generally nooses of twisted hair fixed to stones, *bhoosa* being placed round the rocks to act as bait. The traps consist of a ring of fibrous wood, bound in hair, from which other pieces of wood with

sharpened points project inwards and downwards; these are buried just below the surface, and the unsuspecting antelope treading upon one, passes a foot through the ring, is unable to withdraw it, and is slaughtered at ease. Their flesh forms excellent eating.

The Tibetan Gazelle (*Gazella picticaudata*)

This gazelle is commonly known by its native name of "goa" (pronounced "goo-er"). Its habitat extends from Hanlé in British territory in the west to China in the east, and between the 35th degree of latitude to the northern slopes of the Himalayas, at a height of between 14,000 and 16,500 feet.

It is closely allied to the Chinkara of Hindustan, and is one of the most beautiful animals in existence.

It stands about twenty-five inches at the shoulder, and is of a reddish-grey colour, with a most conspicuous white rump, in the centre of which is a small black tail. During movement, or when the animal is excited, the skin along the ribs is drawn forward, thereby extending the white hairs on the hind quarters until a perfect ruff is formed. It is difficult to assign a reason for the conspicuous marking, as these gazelle live in valleys and on ground devoid of scrub jungle, and attention is often drawn to their whereabouts by their appearance.

Their alarm-note is a sharp, penetrating "shoo," which at once puts the whole herd on the alert. When they are frightened, their mode of progression is similar to that of the Indian antelope, viz., by bounds, all four feet moving in the same direction at once; as a rule, on sighting an enemy they make off immediately, not stopping for a second look. They rarely gaze uphill, as they apparently never expect danger from that direction.

Their senses of hearing, scent and sight are well developed, and as they are shy and always on the alert, afford excellent sport for the rifle.

The favourite haunts of the goa are grassy, easy-sloping nullahs and spurs, with rich, short grass and running water close at hand.

The horns are of a most graceful shape, closely ringed and black in colour; they usually grow to a length of from 12 to 14½ inches.

The flesh is delicious.

BURHEL (*Ovis nahura*)

This animal is known to the natives by the name of Napoo (male na). It stands about thirty-three inches at the shoulder, is of a bluish-slaty colour, and forms the link between the sheep and goat tribes.

But little description is needed, as the burhel is familiar to most sportsmen in the Himalayas, being shot yearly in great numbers in Ladak and the neighbouring states. In Rudok we found them in great herds, particularly in the hills north of Bum Tso, where the highlands are much cut up by precipitous ravines, the ground between being flat and stony; on the tablelands and in these ravines vast herds of burhel were always visible.

A very large percentage of these were females and young, and we only rarely saw a male with a really good head; but old horns measuring as much as thirty inches were frequently picked up in the river-beds.

Burhel, though affording good sport, are not difficult to shoot; the unusual shape of the horns and the difficulty of obtaining a pair measuring over twenty-eight inches, make this animal a welcome prize to the sportsman. The record head measures 31½ inches; circumference, 13½ inches; tip to tip, 22½ inches. The flesh affords excellent eating.

NŸAN (*Ovis ammon*)

Again but little need be said about this fine beast, which shares with the ovis poli the honour of being the largest of all sheep. It may, however, save disappointment to some future sportsman, to state that during our first journey not one shootable ram was seen by us, though near Aru Tso large numbers of ewes and young were daily found grazing in the neighbouring ravines. They are, however, very numerous in

all the ravines and on the slopes of the mountains lying to the north of the Brahmaputra from its source to Tra-dom. Along this stretch of country herds may be seen daily, and some magnificent horns found.

Shapoo (*Ovis vignei*)

The late Mr. Dalgleish reports the existence of shapoo in Tibet, but it is more than doubtful. We never saw any animals, old horns or tracks, while the natives profess entire ignorance as to their existence; Captain Bower, moreover, saw none in his journey across Tibet, and is sceptical as to the probability of this animal being in the country.

The Wolf (*Canis laniger*)

Wherever game is plentiful, the Tibetan wolf is to be found, though on account of his shy nature he is rarely shot.

There are two varieties, the yellow and the black, of which the former are by far the most common.

These wolves are to be found at all altitudes and in all districts. As a rule they hunt singly or in couples, though on one occasion I saw a pack of five together.

The hair, as might be expected, is long and close, while the tail is of great length and thickness. They live principally on antelope and gazelle, for the wild ass with his speed of foot and his hoofs can mostly look after himself, and even the cow yaks with young pay little attention to them when prowling round a herd.

Their chief interest to the zoologist and the sportsman lies in the question as to whether there are two distinct breeds, or whether the litter of pups are coloured irrespective of the colour of the mother and father.

Personally I consider that they are of the same breed, for though the yellow variety are the more numerous, yet a yellow and a black may often be seen together, while on two occasions we saw a black she-wolf with two cubs, a black and yellow, and on two other occasions a black mother with two black young ones.

The colour of the surrounding country and the altitude may have some effect upon them, for in the north of Tibet a black wolf is rarely seen, while round Gartok they are by far the more numerous.

We were unable to discover any difference in their shape or size when placed side by side.

The Tibetan Hare (*Lepus hispidus*)

This animal is to be found all over Western Tibet, its favourite haunts being rocky mountain slopes or short scrub jungle.

It is about the size of an English rabbit, but affords poor sport, as a near approach is always possible—either on account of the creature's inquisitiveness or its extreme fear, which causes it to become almost paralysed, so that it can be knocked over with a stick; a small bore rifle is the best weapon to use.

At certain places in Rudok where low scrub abounded, these hares were found in immense numbers; at one spot just west of Tai Tso, I counted thirty-two in one patch of shrubs in the space of ten minutes. They must, however, change their haunts from time to time, as in two places, Pamzal and Niagzu, where they had previously been reported as very numerous, no trace could be found of them.

In speed and in the ease with which they cross steep and rough ground I know of no animal to surpass them.

We killed very few, as the flesh is tasteless and makes indifferent eating, and also because the Mussulman drivers refused to touch it at all, when there was other flesh to be had. We caught a leveret, which became quite tame in a few days, but unfortunately came to an untimely end.

The Tibetan Sand-Grouse (*Syrrhaptes tibetanus*)

This is a particularly handsome, gamey-looking bird, and, as might be expected from its living in a wind-swept plateau, has strong and abnormally long wings and a powerful flight.

They were first discovered by Mr. Gould in 1850, and are said not to migrate. Their shrill note can be distinguished at a long distance.

There are no more confiding birds and few which afford better eating. It should be understood that with us, all our gun-shooting was for the pot, and not for sport; at no time were cartridges so plentiful that we could take fancy shots, and we often spent some time in waiting for three or four birds to be in line before expending one cartridge. On one occasion these grouse were more than usually foolish; they waddled along on their short legs just in front, and no amount of firing would persuade them to fly more than a few yards. As there were five coveys within a radius of 100 yards, we passed from covey to covey, taking five or six birds from each, and left the remainder as undisturbed as when first seem. Large and numerous coveys are to be found inhabiting the upper reaches of the Brahmaputra.

Wildfowl—Geese, Duck, Teal, etc.

Not many of the Chang lakes are inhabited by wildfowl for breeding purposes, mainly because so few of them contain fresh water. On Arport Tso in June there were about twenty pairs of bar-headed geese, which were about to nest in the lagoons lying at the south-west end of the lake.

On the small fresh-water lake to the north-east of Antelope Plain we saw a goodly number of bar-headed geese, pintails, brahminis and cranes, while Lake Markham held a fair number of brahmini duck, but nothing else.

Huping Tso seemed to be a perfect breeding-place, and, on account of the weeds and fresh-water shrimps, it is probable the birds go there earlier in the year, though we saw none at the time of our visit.

We were agreeably surprised by Bum Tso, for here countless numbers of geese, pintails, mallards, pochards, and teal were seen; on account of the absence of cover, the ·303 rifle was found more useful than the gun. Some of the flock contained many thousands of birds.

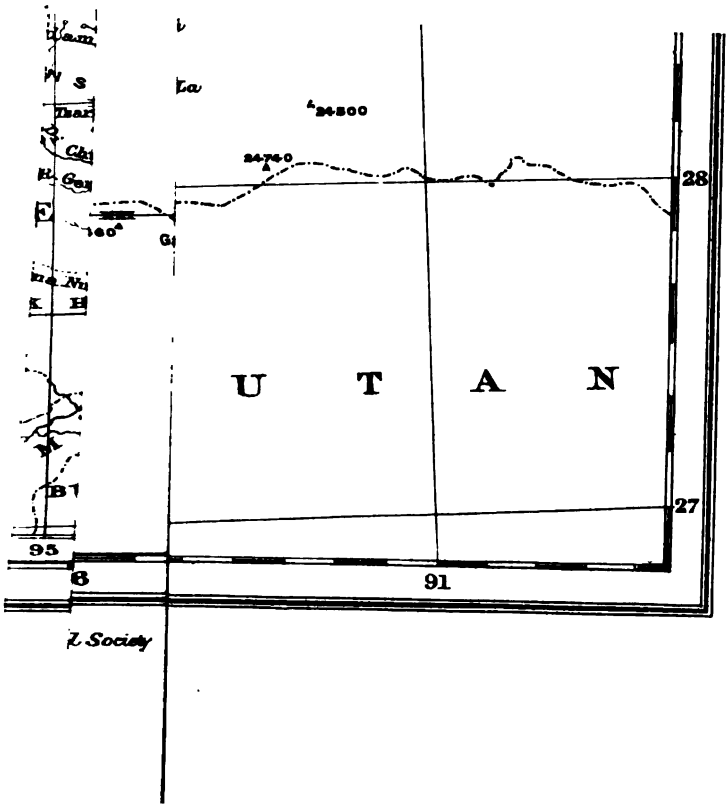
Tai Tso was another lake on which there was an almost

incredible number of birds of all varieties; the flight-shooting in the evening afforded excellent sport.

There is good duck-shooting on the Kheo River, on the banks of which, near Noh, a woodcock and a couple of snipe were bagged.

Ram chikor were found in large numbers to the west of Memar Chhaka, and near all the villages in the Brahmaputra valley between Lhatse and Saka. During the night the birds come down to the fields to feed, and in the early morning are to be found wending their way slowly up the hillsides. As a rule they are very tame, and easily shot.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA



INDEX

Abdul Khalik, caravan-bashi, 8, 47, 97, 124, 132, 149, 155.
Alexander the Great, 289.
Amar Singh Rajah, Sir, 10.
Andrade, Antonio de, 8.
Antelope, 35, 85, 232, 311.
—— horns, 48, 62.
—— Plain, 47, 66.
Armenian missionaries, 3.
Arport Tso, 5, 45, 69.
Arrack, 187.
Aru Mountains, 54, 111.
—— water of, 111.
—— Tso, brigandage near, 111.
Ayi La, 268, 276, 293.
—— crossing of, 278.
—— height of, 278.

Bailey, Lieut. F.M., 162.
Barkha, 249, 256, 259.
—— road from, 267.
Barley. *See* Grim.
Baths, hot, 208.
Bhoosa, 35.
Blood, drinking of, 96.
Bonvalot, Mons., 4.
Boortsa, use of, 32.
Bower, Capt., 4, 8, 141.
Brahmaputra, 216.
—— fords, 206, 242.
—— ice floes, 218.
—— source of, 243.
Brahmini duck, 46, 92.
Bridge, game of, 266.
—— over Brahmaputra, 192, 211.
—— at Poo, 303.
—— at Tooling, 289.
Burhel, 115, 141, 315.
Butterfly, 43.

Capuchin Friars, 4.
Cartridges, 11.
Cataract, prevalence of, 199.
Caves, 282.
Chabrang. *See* Tsaparang.
Chain bridge, 192.
Champas. *See* Tibetans.
Chandra Das, 169.
Chang, 23.
Chang La, crossing of, 20.
Changchenmo Valley, 31, 33.
Chang Dang, 299.
Chi Chu, valley of, 207.
Children, dearth of, 241.
Chimray, 19.
Chinese, 251, 287.
Chinese post office, 226
—— Amban, 190.
—— fort, 186.
Chini, 304.
Chorkangma, 29, 153.
Chumurti country, 292
Chut, 10.
Chutzai, 43, 46.
Cold, 39, 250, 299

Darchan, 264.
Dead, disposal of, 200.
Deasy, Capt., 4, 8, 71 129
—— Group, 61, 63.
—— buried stores, 73.
Delai Lama, 160, 178, 182.
Dingri, 212.
Doctor, Tibetan, 215.
Dog, Lhasa, 214.
—— watch, 29, 37, 103.
Dogra, army, 251.
Dongtse, 168.
D'Orleans, Duc, 4.
D'Orville, Albert, 3.
Dunkar, 281.
Durgu, 22.
Dzing-ra, 233, 238.

Everest, Mount, 212, 215.

Ferry at Lhatse, 206.
—— at Lelung, 217.
Fish, 209, 250.
—— *See* Trout.
Flesh eaters, 96.
Flour, 15.

Forts of Gyantse, 168, 171.
—— Nuk, 299.
—— Pen-nang, 171.
—— Shigatse, 172, 185.
—— Tsaparang, 295.
Fowls, 34.
—— eggs, 49, 228.

Gabet, Father, 4.
Gar Gunsa, 270, 272, 293.
—— Yarsa, 272.
Garpons, 272, 274.
—— arrival of, 270.
—— dress of, 273, 275.
—— servants of, 271, 275.
Gartok, appearance of, 271.
—— Governors. *See* Garpons.
—— importance of, 272.
—— situation of, 269.
Gauri Kund, Lake, 263.
Gazelle, 50, 121, 232, 314.
Gifts, 294.
Gold, 184, 226, 257.
Gold-diggers, 60, 122.
Goldfields, 60, 63, 132.
Gore, Colonel St. G., 7.
—— Tso, 61.
Gratitude, 14.
Grim, transport of, 10, 35.
—— cleaning, 24.
—— cost of, 150.
Grueber, Johann, 3.
Guard, grazing, 58.
Gün-chu Tso, 244, 247.
Gurkhas, 167.
Gyantse, 185.

Hal-lal, custom of, 72, 86.
Hare, 36, 99, 146, 317.
Hart, Mr., 292, 303.
Hira Singh, 174, 199, 287.
Hiram Singh, 23.
Hot springs, 34, 43, 208, 212.
Huc, Father, 4, 214.
Huping Tso, 107.
Hurricane, 97.

Ice, 50, 61, 218, 277.
Indus, 269.
Instruments, 11.

Jai Chand, Thakur, 292, 294.
Jerka La, crossing of, 268.
Jesuits, 3.
Jewellery, 294.
Jorgya, 171.
Junket, 246.

Kailas Parbat, 261.
Kaju, 214.
Kamure, 43.
Kang-gang Gompa, 189.
Ka Sang, arrival of, 164, 246.
—— departure, 276.
Kashmiris, 34, 39, 134, 148.
Kepsang, 35.
Khamba Dzong, 139, 159.
Kheo River, 146, 151.
Khub, 301, 320.
Kiang, 36, 50, 307.
Kuan Luans, 66, 78, 102.
Kūra La, 212.
Kyam, 33.
Ky-ni-puk, 291.

Ladaki, men, 13, 126, 134, 265.
—— ponies, 14, 73.
—— women, 15.
Lak-tsang, 242.
Lammergiers, 48.
Lanak La, crossing of, 38.
Landor, Mr. Savage, 248.
Lark, 43, 92.
—— hatching of eggs, 46.
Legya, 247.
Leh, 5, 8.
Lelung, 216.
Lelung Ferry. *See* Ferry.
—— pigeons, 216.
Leopard, snow, 222.
Lhasa, Treaty of, 160, 175.
—— terriers, 202.
Lhatse Fort, 198, 203.
—— Monastery, 201.
Lipu Lekh, 251.
Littledale, 4.
Lodu, 216.
Luk, 298.
Lulung, 244.

Macdonald, Gen. Sir R., 171, 192.
Magniac, Mr. V., 168.
Mahomed Esa, 167.
Manasarowar, 247.
—— appearance, 250.
—— channel from, 248.
—— holiness, 247.
Markham, Lake, 92.
Marsi-mik La, 5, 29, 153.
Mart, trade, 161, 256.
Ma-yum La, crossing of, 243.
Medicine, 12.
Memar Chhaka, 58.
Memo, Mt., 244, 247.
Misar, 266.
Miyang, 300.
Molluscs, 41, 43.
Monasteries, 170.
—— Dongtse, 168.
—— Dunkar, 281.

Monastery, Lelung, 217.
—— Lhatse, 201.
—— Noh, 151.
—— Nuk, 298.
—— Pin-dzo-ling, 193.
—— Shalu, 172.
—— Shigatse, 183.
—— Tooling, 288.
—— Tradom, 225.
Money, 257.
Monkeys, 222.
Montgomery, Capt., 175.
Moorcroft, Mr., 4.
Moravian missionaries, 16, 155, 292, 304.
Mountain sickness, 22.
Munak Thok, 132, 135.

Nain Singh, Pundit, 161, 175, 239, 245, 269, 289.
Nak-chak, 242.
Nak-luk-ru, 249.
Nepal trader, 177.
—— War, 189, 259.
Nestorian missionaries, 3.
Nik-yu, 269.
Niti La, 251, 252.
Noh, 147, 150.
Nuk, 298.
Nurbu Chungse, 170.
Nyak Tso, 151.
Nyang Chu, 171.

O'Connor, Capt., 168, 171, 174, 179.
Operation, surgical, on Tibetan, 199.
—— on pony, 30, 227.
Ovis ammon, 112, 121, 128, 224, 230, 234, 244.

Pallo Letok, 60.
Pamzal, 31, 32.
Pangong, Lake, 26, 152.
Par Chu, 268.
Parr, Captain, 191.
Partridges, 208, 212.
Pashm, 257, 265.
Pen-nang, fort, 171.
Permit, 164.
Pho-brang, 5, 26, 154.
Pilgrim, 263.
Pin-dzo-ling, 193.
Podong Tashikong, 192.
Poisonous grass, 93.
Poo. *See* Spoo.
Post, Tibetan, 229.
—— Chinese, 226.
Pota-la, 160.
Prayer flags, 207, 218, 243.
Prime Minister, 180, 183.
Przhevalsky, M., 4.
Pul Tso, 82.
Purang, position of, 250.
—— roads from, 251.
—— battle of, 251.

Quicksands, 59.

Rajen, 242.
Rakas Tal, 248, 259.
—— passage from, 259.
Ram chikor, 209, 319.
Ram Singh, 10, 155, 174.
Ranbirpur, 19.
Ranbir Singh, 251.
Rats, 43, 63.
Ravens, 43.
Ravines, 55, 280.
Red Idol Gorge, 192.
Rhins, Dutreuil de, 4.
Rice, 15.
Rifles, 11.
Rivers, Nyang Chu, 171.
—— Indus, 269.
—— Kheo, 146, 151.
—— Sutlej, 167, 259, 266, 280.
—— Tsangpo. *See* Brahmaputra.
Rockhill, Mr., 4.
Rudok, festival at, 129.
—— dzongpon of, 149.
Rujé, 211.
Rupee, 257, 306.
Rushes, 43.
Ryder, Major, 257.

Sabhana, 11, 25, 34.
Saddles, government, 279.
Saka Dzong, 221, 240.
Salaamy sheep, 173.
Salt lakes, 61, 82, 93, 102, 106, 111, 244.
Sand-grouse, 87, 127, 265.
Sand-marks, 26.
Savage Landor, Mr., 248.
Scarf of greeting, 173, 182, 188.
Serai, Leh, 13.
Shabkading, 191.
Shalu, 171.
Shapoo, 316.
Shawls, Kashmir, 265.
Shemen Tso, 49.
Shigatse, sight of, 172.
—— arrival at, 175.
—— town of, 185.
Shipki, 300.
—— road from, 301.
Shrimps, 107, 152.
Sickness, 12, 78, 199.
Sight of natives, 95.
Simla club, 305.

Sirang La, 298.
Skeletons of ponies, 54.
So, 237.
Soomjeling Plain, 5, 41.
Soonam Tilney, 23.
—— Sirring, 71, 149.
Spoo or Poo, 292, 304.
Stages, 240.
Stein, Capt., 168.
Stores, 15.
—— buried, 71, 80.
Strachey, Capt. H., 248.
Sutlej River, 3, 266, 280.
—— source of, 259.
—— Valley, 280, 291, 296.
Sven Hedin, 4, 11, 142, 152.

Tai Tso, 144.
Taklakot. *See* Purang.
Tankse, 5, 23, 154.
Tashi Lama, 178, 188.
—— Lhumpo, 172, 176, 183.
Taxes, 237.
Tea, 64, 255.
Tents, 12.
—— Tibetan, 131, 241.
Tibet Mission, 4, 139, 159.
Tibet ponies, 148, 186, 195.
Tibetans, appearance of, 117.
—— bravery of, 137, 253.
—— customs of, 60, 96, 241.
—— dress of, 52, 117, 148, 273.
Tibu, 290.
To, 226.
Tobomorpo, 41.
Tokchen, 245, 246.
Tooling, 285.
—— bridge of, 289.
Trade agent, 292.
Tradom, 225.
Transport, 27.
—— desertion of, 38, 76.
Trok-poh-shar, 265.
Trout, 23, 25, 26.
Truk-sum, 238, 240.
Tsaparang, 3; fort, 295.
—— dzongpon, 293.
Tso-Mo-Gnalari, 152.
Tuna, 159.
Tunduk, 96.
Tunkas, 257.
Turner, Mr., 4.
Turquoises, 117, 184, 295.

Uk-rung, 245.
Unicorn, 214.
Untadhaura Pass, 251

Warren Hastings, 4.
Watch guard, 136.
Wellby, Captain, 4, 5.
Wildfowl, 84, 93, 130, 145.
Wilton, Mr., 161.
Wolf, 37, 51, 128, 264, 316.
—— red, 128, 231.
—— black, 245.
—— holes, 50.
Wood, Capt. H., 162.

Yaks, climbing powers of, 21.
—— drivers of, 241.
—— hire of, 24.
—— pace of, 25.
—— wild, 46, 48, 49, 50, 56, 90, 101, 108, 112, 277, 309.
Yatung, 161.
Yenju, 219.
Yeshil Kul, 71.
Younghusband, Col. Sir F., 160, 167.

Zarawar Singh, 19, 251, 289.
Zingral, 20.
Zogi La, 11.

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

Printed by MORRISON & GIBB LIMITED, *Edinburgh*

Telegrams:
'Scholarly, London.'

41 and 43 Maddox Street,
Bond Street, London, W.,
October, 1905.

Mr. Edward Arnold's
List of New Books.

ESSAYS AND ADDRESSES ON ECONOMIC QUESTIONS (1865-1893).

WITH INTRODUCTORY NOTES (1905).

By the RIGHT HON. VISCOUNT GOSCHEN.

Demy 8vo. **15s. net.**

This collection of essays and addresses forms an intensely interesting survey of all the most important economic aspects of our history during the last forty years. Lord Goschen's qualifications for such a survey need not be enlarged upon. His treatment of the most intricate questions of finance and currency never fails to bring them into concrete and vital connection with our national life; and in this volume he deals with these questions rather from the standpoint of a practical man of business or of a public servant anxious to inquire into financial, economic, and social facts than as the adherent of any special school of political economy.

Completeness and finality has been given to the record here presented by Introductory Notes and additions, which represent a further expenditure of work and thought out of all proportion to their amount, while all the freshness and vividness of contemporary expressions of opinion has been preserved.

LONDON: EDWARD ARNOLD, 41 & 43 MADDOX STREET, W.

THE GREAT PLATEAU.

Being an account of Exploration in Central Tibet, 1903, and of the Gartok Expedition, 1904-1905.

By CAPTAIN C. G. RAWLING,

SOMERSETSHIRE LIGHT INFANTRY.

Demy 8vo. With Illustrations and Maps. **15s. net.**

Captain C. G. Rawling, with one English companion, accomplished in 1903 a remarkable journey through North-West Tibet, penetrating far into the interior and surveying over 38,000 square miles of hitherto unknown country. Great hardships were encountered and difficulties overcome. When the explorers attempted to enter the sacred town of Rudok they were captured by the Tibetans, and forced to make a long détour in order to reach British territory.

On his return to India, Captain Rawling joined the Tibet Expedition, and immediately after the signing of the Lhasa treaty was despatched by Sir F. Younghusband to Gartok. The account of his journey through an absolutely unknown country is full of interest. At Shigatse, the largest town in Tibet, the highest officials and ecclesiastics were visited and the monasteries and forts explored. The Brahmapootra was traced to its source, and both the holy Manasarowar Lake and the Kailas Peak were visited. The party returned to Simla through Gartok and the Indus and Sutlej valleys.

The photographs with which the book is illustrated are of quite exceptional beauty.

IN THE DESERT.

By L. MARCH PHILLIPPS.

AUTHOR OF 'WITH RIMINGTON.'

Demy 8vo. With Illustrations. **12s. 6d. net.**

The author, whose book 'With Rimington' will be remembered as taking high rank among the literature of the South African War, sets himself in this work to trace the effect upon Arab architecture, religion, poetry, and philosophy of the Desert of which the Arab is the child. He believes that, in order properly to appreciate these things, it is necessary first to realize the scenery in which they developed. The result is an extraordinarily vivid picture of life in the Great Sahara, in which notes of travel are combined with descriptions of scenery and people, and the history and methods of the French administration are handled with great skill.

FLOOD, FELL, AND FOREST.

By SIR HENRY POTTINGER, BART.

Two volumes. Demy 8vo. With Illustrations. **25s. net.**

Few men probably know their Norway better than Sir Henry Pottinger, and fewer still have described it, from the point of view of sport, better than he has done in this book, in which the experience of a lifelong sportsman and the graceful literary touch of a skilled writer are combined with the happiest effect. Whether the subject be elk-shooting, salmon-fishing, or camping, Sir Henry abounds in interesting anecdotes and valuable information, and his book cannot fail to give pleasure to all lovers of the rod and gun.

The illustrations are from the author's own sketches, or drawn under his immediate supervision.

TWO YEARS IN THE ANTARCTIC.

Being a Narrative of the British National Antarctic Expedition.

By LIEUTENANT ALBERT B. ARMITAGE, R.N.R.,

SECOND IN COMMAND OF THE 'DISCOVERY,' 1901-1904; AND OF THE JACKSON-HARMSWORTH POLAR EXPEDITION, 1894-1897.

Demy 8vo. With Illustrations and Map. **15s. net.**

The objects of the recent National Antarctic Expedition were, of course, scientific, but to the general reader there is much more interest to be found in a simple account of where the explorers went, and what they did when they got there. In this book, therefore, Lieutenant Armitage avoids scientific details as far as possible, and aims rather at telling a straightforward story of the daily life, with all its hardships and perils on the one hand, and its boyish amusements and cheery good comradeship on the other, of the little body of picked men who went out in the *Discovery*. His racy narrative, assisted by the beautiful illustrations by Dr. E. A. Wilson, artist to the expedition, and others, and an excellent map, conveys a vivid impression of the Antarctic regions, and the unattractive conditions of existence in them.

THE LIFE OF JOHANNES BRAHMS.

By FLORENCE MAY.

Two volumes. Demy 8vo. With Illustrations. **21s. net.**

The author is exceptionally qualified for the task of writing these volumes by her own acquaintance with Brahms, begun when she was a young student of the pianoforte, and her personal recollections of his teaching are among the most interesting parts of the book. Her aim, in giving some account of Brahms' compositions, has not been a technical one; so far as she has exceeded purely biographical limits she has endeavoured to assist the general music-lover in his enjoyment of the noble achievements of a beautiful life. The materials have been gathered almost entirely at first hand in the course of several continental journeys. Dates of concerts throughout the work have been verified by reference to original programmes or contemporary journals.

FINAL RECOLLECTIONS OF A DIPLOMATIST.

By the RIGHT HON. SIR HORACE RUMBOLD, BART., G.C.B., G.C.M.G.,

AUTHOR OF 'RECOLLECTIONS OF A DIPLOMATIST,' AND 'FURTHER RECOLLECTIONS OF A DIPLOMATIST.'

Demy 8vo. **15s. net.**

Sir Horace Rumbold begins the third and concluding series of his 'Recollections' in the year 1885, at the point to which he brought his readers in the volumes already published. He describes his life as Envoy Extraordinary and Minister Plenipotentiary to Greece from 1885-1888, and to the Netherlands from 1888-1896. In the latter year he was appointed Ambassador to the Emperor of Austria—an exalted position which he retained until his retirement from the Diplomatic Service in 1900.

The conclusion of these 'Recollections' presents a set of Diplomatic memoirs as comprehensive as they are interesting. Sir Horace Rumbold has known nearly all the famous personages of his time, and the personal touches and pleasant anecdotes with which he illuminates their characters render the volumes excellent reading.

A FORGOTTEN JOHN RUSSELL.

Being Letters to a Man of Business, 1724–1751.

Arranged by MARY EYRE MATCHAM.

Demy 8vo. With Portrait. **12s. 6d. net.**

The letters written to an active man of business (those written *by* John Russell are few and unimportant) during a long period of time must necessarily be something of a medley. But if they lack the kind of interest which centres in the life-story of an individual, they offer far more varied and ample material to those who care, with Thackeray, 'to people the old world with its everyday figures and inhabitants.' To the majority of readers probably the most interesting correspondents will be the numerous sea captains—fathers and grandfathers of those who fought under Hawke and Nelson. But all sorts and conditions of men made calls on John Russell's capacity for business or for friendship, writing for the most part in home and intimate fashion of private and domestic matters, illustrating in innumerable ways the ordinary life of the time, and incidentally throwing many interesting sidelights on England's position in the world as a State whose future lay upon the ocean.

ACTS OF THE HOLY GHOST.

A Record of Personal Experience of Religious Revivals and Missions.

By FRANCIS PIGOU, D.D.,

DEAN OF BRISTOL.

AUTHOR OF 'PHASES OF MY LIFE,' 'ODDS AND ENDS,' ETC.

Demy 8vo. **16s.**

Dean Pigou has had twenty-five years' special experience of Parochial Missions, and is generally regarded as an authority on the subject. He has conducted missions in London, Edinburgh, Dublin, Liverpool, Huddersfield, Northampton, Tiverton, Bangor, and many other places. In this volume he has arranged the records of these religious revivals according to the localities at which they occurred. The author's characteristic style and treatment render the whole a most interesting study, which will be welcomed by readers of his previous works.

THEODORE OF STUDIUM:
HIS LIFE AND TIMES.

By ALICE GARDNER,
ASSOCIATE AND LECTURER OF NEWNHAM COLLEGE, CAMBRIDGE.
AUTHOR OF 'JULIAN THE PHILOSOPHER,' 'STUDIES IN JOHN THE SCOT,' 'ROME THE MIDDLE OF THE WORLD,' ETC.

Demy 8vo. With Illustrations. **10s. 6d. net.**

Theodore of Studium (born 759, died 826), though little known in Western Europe, was a man of remarkable abilities and character, who left a deep impression on Byzantine monasticism, and on the thought and life of the Eastern Empire. This biography, founded on Theodore's own writings and those of his contemporaries, endeavours to set forth the various sides of his activity. These are principally (1) his very prominent part in the Iconoclastic Controversy, with his staunch opposition to Cæsaropapism; (2) his monastic reforms; (3) his great services as calligraphist, and as promoter of the preservation and multiplication of manuscripts; (4) his wide correspondence, which throws much light on the morals and manners of his time, as well as on some important historical events; and (5) his poetical activity, shown in works written both in the old classical and the new ecclesiastical metres. The events and conflicts of his life elucidate the tendencies which led to the separation of the Churches and Empires of the East and West.

THE QUEEN'S POOR.
Life as they find it in Town and Country.

By M. LOANE.

Crown 8vo. **6s.**

Of those who work professionally among the poor, and have a firsthand knowledge of their lives and thoughts, most, if not all, have had experiences worthy of record. But, owing either to the absorbing nature of their duties or to the want of a literary gift, very few of them have put on paper the curious things which they have heard and seen from day to day. Miss Loane has not only contrived to find time, in the midst of a busy life of district nursing, to keep notes of her experiences, but has written them in a singularly attractive style, revealing a keen sense of humour, as well as a plentiful supply of common-sense. Her stories are grouped under such suggestive headings as 'Husband and Wife among the Poor,' 'The Religion of the Respectable Poor,' 'The Art of Polite Conversation,' and so forth.

A MEMOIR
OF THE RIGHT HON.
ARTHUR BARON HOBHOUSE,
P.C., K.C.S.I., C.I.E.

By L. T. HOBHOUSE, and J. L. HAMMOND,

AUTHOR OF 'MIND IN EVOLUTION.' AUTHOR OF 'C. J. FOX: A STUDY.'

Demy 8vo. With Portraits. **14s. net.**

Lord Hobhouse, who died in December, 1904, abandoned in middle life a brilliant career at the Chancery Bar for the service of the State, in which he had a long and varied experience. His official career began with his appointment as a Charity Commissioner in 1866, and ended with his retirement from the Judicial Committee of the Privy Council in 1901. Most of his work was of a kind of which the general public knows little. He was Legal Member of the Viceroy's Council in India for five years, and he was a member of the Judicial Committee for twenty years. But at one time he found himself the centre of a vehement controversy, and the part he played as a member of the Endowed Schools Commission marks a turning-point in the history of English education. He had an active share in the movement which won for London its rights of self-government, and he gave many legal judgments which have an historical significance.

SHORT LIVES OF GREAT MEN.

By W. F. BURNSIDE and A. S. OWEN,

ASSISTANT MASTERS AT CHELTENHAM COLLEGE.

Crown 8vo. With Illustrations. **3s. 6d.**

The Cheltenham College memorial of Old Cheltonians who fell in the South African War takes the form of a reredos in the school chapel, filled with forty-four figures illustrating certain aspects of English history and representative men in different callings of life. It has been felt that an account of these great men would be serviceable, not only to those who see these carved figures every day, but to a larger number of readers, who would be glad to have in a compendious form biographies of many of the leading men in English history and literature. The list extends from St. Alban to Gordon, and for the sake of convenience chronological order has been adopted. Illustrations are given of eight typical personages.

SOME DOGMAS OF RELIGION.

By JOHN ELLIS McTAGGART, Litt.D.,

LECTURER IN MORAL SCIENCES, TRINITY COLLEGE, CAMBRIDGE.

Demy 8vo. **10s. 6d. net.**

This book attempts to prove, in the first place, that beliefs as to certain matters of fact beyond our empirical experience are essential for religion, and of fundamental importance for human life. Secondly, it is maintained that such beliefs cannot legitimately rest on faith, but only on argument. It is suggested that the most reasonable form for the doctrine of immortality to take is one which makes each person to have existed for many years before the existence of his present body, and perhaps for all past time.

THE ÆNEID OF VIRGIL.

With a Translation by CHARLES J. BILLSON, M.A.,

CORPUS CHRISTI COLLEGE, OXFORD.

2 vols. Crown 4to. **30s. net.**

These handsome volumes contain on the left-hand page a text based on Conington's, and on the right a line-for-line translation in blank verse.

A FISHING CATECHISM
AND
A SHOOTING CATECHISM.

By COLONEL R. F. MEYSEY-THOMPSON,

AUTHOR OF 'REMINISCENCES OF THE COURSE, THE CAMP, AND THE CHASE.

Two volumes. Foolscap 8vo. **3s. 6d. each.**

Lovers of rod and gun will welcome these valuable handbooks from the pen of an admitted expert. The information given is absolutely practical, and is conveyed, for the most part, in the form of Question and Answer. As the result of some fifty years' experience, the author seems to have anticipated every possible emergency, and the arrangement is especially calculated to facilitate easy reference. There are special chapters on fishing and shooting etiquette, and at the end of each book is a chapter dealing with the legal side of the subject.

THE WALLET SERIES OF HANDBOOKS.

The following five volumes are the new additions to this useful series of handbooks, which range, as will be seen, over a wide field, and are intended to be practical guides to beginners in the subjects with which they deal.

Foolscap 8vo., 1s. *net per volume, paper*; 2s. *net cloth.*

THE MANAGEMENT OF BABIES. By Mrs. Leonard Hill.

The author is an expert in this all-important subject, and her book is confidently recommended to mothers as thoroughly sound, sensible, and free from fads. The medical information may be relied upon absolutely, and the book abounds in practical and most valuable advice. A whole chapter is devoted to the development of intelligence and the importance of early training—a matter too often ignored by mothers and nurses.

ON COLLECTING MINIATURES, ENAMELS, AND JEWELLERY. By Robert Elward, Author of 'On Collecting Engravings, Pottery, Porcelain, Glass, and Silver.'

In this volume the author pursues the same thorough method as in his former work. After several hints to collectors, he gives a careful historical and descriptive summary of each subject, with a short bibliography.

MOTORING FOR MODERATE INCOMES. By Henry Revell Reynolds.

The demand for motor-cars at reasonable prices is rapidly increasing. Mr. Reynolds has taken £500 as the largest sum which his readers are likely to pay for a car, with a proportionate amount in addition for up-keep. He lays down the general principles which should guide the would-be purchaser, and gives sufficient information to enable him to examine any car with understanding. The respective capacities, prices, etc., of a number of cars are given in tabular form. Motor bicycles and other small vehicles receive a considerable share of attention, and there are chapters on driving and the amenities of the road.

ON TAKING A HOUSE. By W. Beach Thomas.

A thoroughly practical guide to the science and art of house-taking is urgently required by most people sooner or later in their lives. Most people, too, are obliged to pay dearly for the kind of experience which is to be found condensed into this little book. Mr. Thomas has accumulated an enormous amount of information on the subject, and his words of warning are calculated to save intending purchasers or lessees from innumerable pitfalls.

THE WALLET SERIES (*continued*).

Foolscap 8vo., 1s. *net per volume, paper; 2s. net cloth.*

COMMON AILMENTS AND ACCIDENTS AND THEIR TREATMENT. By M. H. NAYLOR, M.B., B.S.

This is a lucidly written handbook, covering rather different ground from that usually coming under the description of 'First Aid.' It is intended to meet all ordinary emergencies, and to indicate such treatment as may safely be tried before the arrival of a doctor.

The following volumes have been already published:

ON COLLECTING ENGRAVINGS, POTTERY, PORCELAIN, GLASS, AND SILVER. By ROBERT ELWARD.

ELECTRIC LIGHTING FOR THE INEXPERIENCED. By HUBERT WALTER.

HOCKEY AS A GAME FOR WOMEN. With the New Rules. By EDITH THOMPSON.

WATER-COLOUR PAINTING. By MARY L. BREAKELL ('Penumbra').

DRESS OUTFITS FOR ABROAD. By ARDERN HOLT.

NEW AND CHEAPER EDITION.

THE REMINISCENCES OF SIR HENRY HAWKINS

(Baron Brampton).

Edited by RICHARD HARRIS, K.C.,

AUTHOR OF 'ILLUSTRATIONS OF ADVOCACY,' 'AULD ACQUAINTANCE,' ETC.

Crown 8vo. With Portrait. 6s.

In this edition a few of the more technically legal passages have been omitted, but all the dramatic episodes and characteristic anecdotes remain untouched.

NEW FICTION.

Crown 8*vo.* 6*s. each.*

THE PROFESSOR'S LEGACY.

By MRS. ALFRED SIDGWICK,

AUTHOR OF 'CYNTHIA'S WAY,' 'THE BERYL STONES,' ETC.

A FLOOD TIDE.

By MARY A. DEBENHAM.

THE BROWN HOUSE and CORDELIA.

By MARGARET BOOTH.

A TROMBONE AND A STAR.

By C. T. PODMORE,

AUTHOR OF 'A CYNIC'S CONSCIENCE.'

NEW AND CHEAPER EDITION.

Crown 8*vo.* 2*s.* 6*d.*

RED POTTAGE.

By MARY CHOLMONDELEY.

POLITICAL CARICATURES, 1905.

By F. CARRUTHERS GOULD.

Super royal 4*to.* **6s. net.**

A large-paper edition will also be prepared if a sufficient number of subscribers enter their names before October 31. *Prospectus on application.*

THE ROMANCE OF EMPIRE.

By PHILIP GIBBS,

AUTHOR OF 'FACTS AND IDEAS,' 'KNOWLEDGE IS POWER,' ETC.

Crown 8*vo.*

In this volume Mr. Gibbs tells, in his characteristically interesting style, the story of the expansion of Britain, beginning shortly before the time of Elizabeth, and bringing the account down almost to the present day. Each great division of our Empire beyond the seas is dealt with in turn, and without any sacrifice of historical accuracy or proportion the author gives to his narrative the attractiveness of a well-told romance.

CHEAPER EDITION.

PEN AND PENCIL SKETCHES OF SHIPPING AND CRAFT ALL ROUND THE WORLD.

By R. T. PRITCHETT.

Demy 8*vo. With* 50 *full-page Illustrations.* **3s. 6d.**

ILLUSTRATED EDITION.

HISTORICAL TALES FROM SHAKESPEARE.

By A. T. QUILLER-COUCH ('Q.'),

AUTHOR OF 'THE SHIP OF STARS,' ETC.

Crown 8*vo. With Illustrations from the Boydell Gallery.* **6s.**

The value of this much-appreciated work will, it is believed, be enhanced by the addition of sixteen selected illustrations from the well-known Boydell collection.

RACES OF DOMESTIC POULTRY.

By EDWARD BROWN, F.L.S.,

SECRETARY OF THE NATIONAL POULTRY ORGANIZATION SOCIETY.
AUTHOR OF 'POULTRY KEEPING: AN INDUSTRY FOR FARMERS AND COTTAGERS,' 'INDUSTRIAL POULTRY KEEPING,' 'PLEASURABLE POULTRY KEEPING,' ETC.

Crown 4to. With Illustrations. **6s. net.**

This important and comprehensive work, by an admitted master of his subject, will be welcomed by all who are interested in poultry-keeping. Chapters I. and II. deal with the origin, history, and distribution of domestic poultry, and with the evolution and classification of breeds; the next ten chapters are devoted to the various races of fowls; Chapters XIII. to XV. treat of ducks, geese, and turkeys. The remaining chapters are on external characters and breeding. There are also Appendices.

THREE LITTLE COOKS.

By LUCY CRUMP.

Square crown 8vo. With Illustrations by Gertrude M. Bradley. **3s. 6d.**

This is a charming little story for children, describing how Ophelia, Thomas, and Heidi learnt cookery with a toy stove.

NEW EDITION, REVISED AND ENLARGED.

COMMON-SENSE COOKERY.

For English Households, with Twenty Menus worked out in Detail.

By COLONEL A. KENNEY-HERBERT,

AUTHOR OF 'FIFTY BREAKFASTS,' 'FIFTY LUNCHES,' 'FIFTY DINNERS,' ETC.

Large crown 8vo. With Illustrations. **6s. net.**

The author has so largely rewritten this edition that it is practically a new book. Besides being brought up to date with the very latest ideas on the subject, it is much enlarged, and now contains a number of attractive full-page illustrations.

RECENT ADVANCES IN PHYSIOLOGY AND CHEMICAL PATHOLOGY

By A. P. BEDDARD, M.A., M.D.,
ASSISTANT PHYSICIAN, LATE DEMONSTRATOR OF PHYSIOLOGY, GUY'S HOSPITAL;
LEONARD HILL, M.B., F.R.S.,
LECTURER ON PHYSIOLOGY, THE LONDON HOSPITAL;
J. J. R. MACLEOD, M.B.,
PROFESSOR OF PHYSIOLOGY, WESTERN RESERVE UNIVERSITY, CLEVELAND, U.S.A.;
LATE DEMONSTRATOR OF PHYSIOLOGY, THE LONDON HOSPITAL;
BENJAMIN MOORE, M.A., D.Sc.,
JOHNSTON PROFESSOR OF BIO-CHEMISTRY IN THE UNIVERSITY OF LIVERPOOL;
AND M. S. PEMBREY, M.A., M.D.,
LECTURER ON PHYSIOLOGY, GUY'S HOSPITAL.

Demy 8*vo*. **16s. net.**

This book, which is edited by Mr. Leonard Hill, consists of Lectures on Physiological Subjects selected for their direct clinical interest, and designed to meet the requirements of advanced students of Physiology. Dr. Beddard deals with Digestion, Absorption, Lymph, Urea, and Secretion of Urine; Mr. Hill himself with the Atmosphere in its Relation to Life, Metabolism of Water and Inorganic Salts, and Metabolism of Fat; Professor Macleod with the Metabolism of the Carbohydrates, Hæmolysis, Uric Acid, and the Purin Bodies; Professor Moore with Vital Energy, Ferments, and Glandular Mechanisms; and Dr. Pembrey with the Exchange of Respiratory Gases, Influence of Temperature, Sources of Muscular Energy and Fatigue, and Internal Secretion.

A MANUAL OF PHARMACOLOGY.

By WALTER E. DIXON, M.A., M.D., B.Sc. LOND., D.P.H. CAMB.,
ASSISTANT TO THE DOWNING PROFESSOR OF MEDICINE IN THE UNIVERSITY OF CAMBRIDGE, EXAMINER IN PHARMACOLOGY IN THE UNIVERSITIES OF CAMBRIDGE, GLASGOW, AND DUNDEE.

Demy 8*vo*. **15s. net.**

This text-book, which is prepared especially for the use of students, gives a concise account of the physiological action of Pharmacopœial drugs. The subject is treated from the experimental standpoint, and the drugs are classified into pharmacological groups. The text is fully illustrated by original tracings of actual experiments and by diagrams.

NEW EDITION.

PRACTICAL PHYSIOLOGY.

By A. P. BEDDARD, M.A., M.D., J. S. EDKINS, M.A., M.B., L. HILL, M.B., F.R.S., J. J. R. MACLEOD, M.B., AND M. S. PEMBREY, M.A., M.D.

Demy 8vo. Copiously illustrated with figures of physiological apparatus, diagrams, and a large number of interesting tracings. **12s. 6d. net.**

VALVES AND VALVE GEAR MECHANISMS.

By W. E. DALBY, M.A., B.Sc., M.INST.C.E., M.I.M.E.,
PROFESSOR OF ENGINEERING, CITY AND GUILDS OF LONDON CENTRAL TECHNICAL COLLEGE.

Royal 8vo. With numerous Illustrations. **21s. net.**

Valve gears are considered in this book from two points of view, namely, the analysis of what a given gear can do, and the design of a gear to effect a stated distribution of steam. The gears analyzed are for the most part those belonging to existing and well-known types of engines, and include, amongst others, a link motion of the Great Eastern Railway, the straight link motion of the London and North-Western Railway, the Walschaert gear of the Northern of France Railway, the Joy gear of the Lancashire and Yorkshire Railway, the Sulzer gear, the Meyer gear, etc. A chapter is added on the inertia stresses in the links of a valve gear, and an actual example of the inertia loading of a Joy gear is fully discussed.

NEW AND REVISED EDITION.

FOOD AND THE PRINCIPLES OF DIETETICS.

By ROBERT HUTCHISON, M.D. EDIN., F.R.C.P.,
ASSISTANT PHYSICIAN TO THE LONDON HOSPITAL AND TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

Demy 8vo. With 3 Plates in colour and numerous Illustrations in the text. **16s. net.**

This important work, the first edition of which was described by the *Guardian* as 'one of the most enthralling books ever published on the subject,' has been thoroughly revised by the author in the light of the experience of recent years, and is now absolutely up to date.

SURGICAL NURSING

And the Principles of Surgery for Nurses.

By RUSSELL HOWARD, M.B., M.S., F.R.C.S.,

LECTURER ON SURGICAL NURSING TO THE PROBATIONERS OF THE LONDON HOSPITAL; SURGEON TO OUT-PATIENTS, ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN; SURGICAL REGISTRAR, LONDON HOSPITAL.

Crown 8vo. With Illustrations. **6s.**

This is an exceedingly lucid and comprehensive handbook on the subject, and contains all the most approved methods very clearly arranged.

THE LAWS OF HEALTH.

By D. NABARRO, M.D., B.Sc., D.P.H.,

ASSISTANT PROFESSOR OF PATHOLOGY AND BACTERIOLOGY, UNIVERSITY COLLEGE, LONDON.

Crown 8vo. With Illustrations. **1s. 6d.**

This volume takes the form of a very simply-written primer of health, in which the direct application of the science of physiology to every-day life is shown, while care is taken to avoid technical terms whenever possible. The author's chief aim is to give such explicit directions as will, if acted upon, help the reader to develop a sound mind in a sound body, and, at the same time, to demonstrate in a simple manner why each rule or warning is given. He also shows in almost every chapter the effect on the tissues and nervous system of a misuse of alcoholic drink and tobacco.

LINGUA MATERNA.

By R. WILSON, B.A.,

AUTHOR OF 'A FIRST COURSE IN ENGLISH ANALYSIS AND GRAMMAR,' ETC.

Crown 8vo. **3s. 6d.**

This book is intended for teachers who wish to keep themselves abreast of what has been aptly called 'The New English Movement.' The author discusses in turn each of the branches of school-work in English, describes methods adopted in some of the best of our schools, and suggests schemes of work to meet the Government requirements in the native language and literature. The volume aims at being practical and suggestive, a guide to practical work rather than a contribution to airy speculation.

LONDON: EDWARD ARNOLD, 41 & 43 MADDOX STREET, W.

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

RETURN TO the circulation desk of any
University of California Library
or to the
NORTHERN REGIONAL LIBRARY FACILITY
Bldg. 400, Richmond Field Station
University of California
Richmond, CA 94804-4698

ALL BOOKS MAY BE RECALLED AFTER 7 DAYS

- 2-month loans may be renewed by calling (510) 642-6753
- 1-year loans may be recharged by bringing books to NRLF
- Renewals and recharges may be made 4 days prior to due date.

DUE AS STAMPED BELOW

JUL 05 1996

RETURNED

MAY 28 1996

Santa Cruz

12.000 (11/95)

YC 42141


DS785
R3
Rawlins
141939